



Natural Resources Conservation Service In cooperation with the Research Division of the College of Agricultural and Life Sciences, University of Wisconsin

## Soil Survey of Washburn County, Wisconsin

Subset of Major Land Resource Areas 90 and 91



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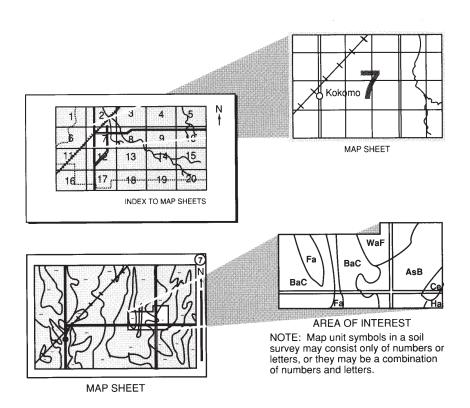
## **How To Use This Soil Survey**

This publication consists of a manuscript and a set of soil maps. The information provided can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described. The map symbols and names also appear as bookmarks, which link directly to the appropriate page in the publication.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



#### National Cooperative Soil Survey

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey. This survey was made cooperatively by the Natural Resources Conservation Service and the Research Division of the College of Agricultural and Life Sciences, University of Wisconsin. The survey is part of the technical assistance furnished to the Washburn County Land and Water Conservation District. The State of Wisconsin provided financial assistance, and the Wisconsin Department of Natural Resources provided technical assistance.

Major fieldwork for this soil survey was completed in 2001. Soil names and descriptions were approved in 2002. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2002. Digitizing of this soil survey was completed under the direction of the Madison, Wisconsin, digitizing unit in 2002. The most current official data are available on the Internet.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

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#### Caption for Cover Photo

The Spooner Hills (background) represent a common landform in central Washburn County. The surrounding valley floors are flat, sandy remnants of Glacial Lake Grantsburg or outwash plains.

Additional information about the Nation's natural resources is available online from the Natural Resources Conservation Service at http://www.nrcs.usda.gov.

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#### **Foreword**

Soil surveys contain information that affects land use planning in survey areas. They include predictions of soil behavior for selected land uses. The surveys highlight soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

Soil surveys are designed for many different users. Farmers, foresters, and agronomists can use the surveys to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the surveys to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the surveys to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described, and information on specific uses is given. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

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# Soil Survey of Washburn County, Wisconsin, Subset of Major Land Resource Areas 90 and 91

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#### **How This Survey Was Made**

This survey was made to provide information about the soils and miscellaneous areas in the survey area, which is in Major Land Resource Areas 90 and 91. The majority of MLRA 90 occurs in Wisconsin, and the majority of MLRA 91 occurs in Minnesota. Major land resource areas (MLRAs) are geographically associated land resource units that share a common land use, elevation, topography, climate, water, soils, and vegetation (USDA, 1981). Washburn County, which is in northwestern Wisconsin (fig. 1), is a subset of MLRA 90, Central Wisconsin and Minnesota Thin Loess and Till, and MLRA 91, Wisconsin and Minnesota Sandy Outwash. Map unit design and the soil descriptions are based on documentation of the occurrence of each soil throughout the MLRAs.

The information in this survey includes a brief description of the soils and miscellaneous areas and interpretive tables showing soil properties and the subsequent effects on suitability, limitations, and management for specified uses.

During the fieldwork for this survey, soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landscape or segment of the landscape. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landscape, soil scientists develop a concept, or model, of how the soils were formed. Thus, during mapping, this model enables the soil scientists to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Individual soils on the landscape commonly merge into one another as their characteristics gradually change. To construct an accurate map, however, soil

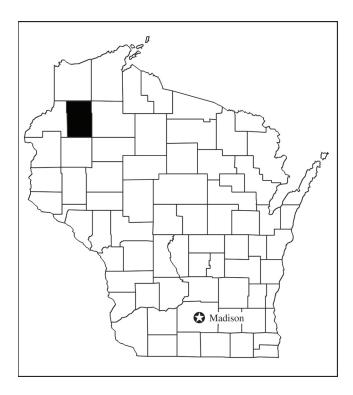


Figure 1.—Location of Washburn County in Wisconsin.

scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they observed. The maximum depth of observation was about 80 inches (6.7 feet). Soil scientists noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, soil reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Interpretations are modified as necessary to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For

example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a zone in which the soil moisture status is wet within certain depths in most years, but they cannot predict that this zone will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil scientists were denied access to a few tracts in the county. These areas were mapped using knowledge of soil patterns in the surrounding area and by aerial photo interpretation. The identification of soil properties and the delineations of soil boundaries are less accurate on these tracts than in areas where soil scientists had access to the land and could examine the soils. On the detailed soil maps, these tracts are labeled "Reduced Reliability, Access Denied."

## Formation and Classification of the Soils

Soil is produced by the action of soil-forming processes on materials deposited or accumulated by geologic forces. The characteristics and properties of soil in a given area are determined by (1) the physical and mineralogical composition of the parent material; (2) the climate under which the soil material has accumulated and existed since accumulation; (3) the living organisms on and in the soil; (4) the relief, or lay of the land; and (5) the length of time the forces of soil formation have acted on the soil material (Jenny, 1941). The relative effect of each of these factors is reflected in the soil profile.

The interaction of these factors during the transformation of the parent material into soil generates complex physical, chemical, and biological processes that cause minerals to become weathered and organic matter to accumulate. Material in suspension or in solution moves downward through the soil to form definite layers, or horizons, in the soil. These layers—surface layer, subsurface layer, subsoil, and substratum—are defined in the Glossary.

All of the major factors of soil formation are interrelated. When one factor changes, the other four factors are affected. The following paragraphs describe the factors of soil formation as they relate to the soils in the survey area.

#### **Parent Material**

Parent material largely determines the physical and chemical properties of the soil, such as the capacity or ability of the soil to store water and nutrients for plants and the rate at which water can pass through the soil.

The soils in Washburn County formed in a wide variety of parent materials, including till, outwash, glaciolacustrine deposits, and alluvial deposits.

Till is unsorted, unstratified drift consisting mainly of clay, silt, and sand. It may contain gravel, cobbles, stones, or boulders. The till in the southern part of the county is dominantly sandy loam. Freeon and Magnor soils are examples of soils that formed in silty deposits and in the underlying loamy till. The loamy till is dense at a depth of 40 to 60 inches. This dense layer restricts the movement of water through the soil.

Fremstadt and Spoonerhill soils are examples of till soils that are dominantly sandy throughout. They have a thin loamy upper layer but have friable sandy till in the subsoil and substratum. These soils are in the central part of the county on moraines surrounded by sandy outwash soils.

Some of the soils in the northeastern part of the county that formed in till are underlain by basalt bedrock. Magroc and Metonga soils are examples of soils that formed in silty deposits underlain by till over the bedrock.

Outwash is sand, sand and gravel, or stratified sand and gravel deposited by water flowing from a melting glacier. Rosholt, Scott Lake, and Oesterle soils formed mostly in loamy deposits over sandy and gravelly outwash. Anigon, Antigo, Brill, Sconsin, Billyboy, and Poskin soils formed mostly in silty deposits over sandy and gravelly outwash.

Graycalm, Grettum, Mahtomedi, and Menahga soils are examples of outwash soils that are sandy or gravelly throughout. These soils are in the central and northwestern parts of the county.

Glaciolacustrine deposits are materials ranging from fine clay to sand derived from glaciers and deposited in glacial lakes, mainly by glacial meltwater. Many deposits are interbedded or laminated. In Washburn County, ice-walled lake plains formed as surrounding stagnant ice melted. These dish-shaped plateau formations are easy to recognize on topographic maps (Johnson, 2000). Barronett, Comstock, and Crystal Lake soils are examples of soils that formed in areas where these deposits are dominantly loamy. Cublake, Flink, and Sissabagama soils are examples of soils that formed in areas where loamy glaciolacustrine deposits are covered by deep deposits of sandy outwash.

Other glaciolacustrine deposits in Washburn County were laid down in areas once covered by Glacial Lake Grantsburg. Glacial Lake Grantsburg formed as the Grantsburg Sublobe of the Des Moines glacial advance dammed the southwest-flowing St. Croix River in the vicinity of Grantsburg in Burnett County. It is estimated that Glacial Lake Grantsburg lasted for about 80 to 100 years (Johnson, 2000). Dody, Karlsborg, and Perida soils are examples of soils that formed in areas where a thin layer of clayey Glacial Lake Grantsburg glaciolacustrine deposits were covered by moderately deep or deep sandy outwash or glaciolacustrine deposits. These soils occur in small pockets in the east-central part of the county.

Some of the soils in the county, such as Totagatic and Winterfield soils, formed in sandy postglacial alluvial deposits that were laid down as rivers overflowed and deposited fresh sediments on the flood plains. Fordum soils are examples of soils that formed in loamy alluvial deposits.

#### Climate

Climate influences soil formation by providing the moisture and temperatures necessary for the weathering of parent material. It also alters the parent material through the mechanical action of freezing and thawing.

Water dissolves and transfers soluble materials and nutrients to the lower parts of the soil. Reaction, or pH, is largely influenced by this process. Temperature affects the rate at which chemical reactions and biological processes proceed. These reactions and processes are slower at a lower temperature than at a higher temperature. Moisture and temperature also affect the kinds of plants and animals that grow on and in the soil. The accumulation and decomposition of organic material also are influenced by moisture and temperature.

Wind can affect the development of soil by adding or removing fine particles of soil or organic material. It also affects the moisture content of soils by influencing the rate of evaporation.

Climate can also have more localized effects. For example, north- and east-facing slopes tend to be cooler and wetter than south- and west-facing slopes. Depressional areas generally have cooler temperatures for a longer part of the year than summits and slopes of hills.

Washburn County has a cool, subhumid continental climate that favors the growth of trees and the formation of leached, acid soils with a thin, dark surface layer and a clay-enriched subsoil.

#### **Living Organisms**

Living organisms, such as plants, bacteria, fungi, insects, earthworms, nematodes, and rodents, influence the formation of soils. In addition to providing organic matter to the soil, their activities result in the development of soil structure and the formation of voids in the soil and thus encourage the transferral of clay and nutrients from the upper layers to the subsoil.

Plants generally have more influence than other living organisms on soil formation. Plant roots excrete substances that act on the parent material to bring nutrients or mineral substances into solution. These nutrients are translocated by plant roots upward to stems and leaves. When the plants die, minerals and nutrients are released to the upper soil layers. The organic acids formed from the decaying plant residue accelerate soil formation by reacting with rock and mineral constituents. Plants also affect soil formation by modifying the effects of climate—for example, by removing soil moisture through evapotransportation and by reducing the hazard of erosion.

Soil organisms decompose organic compounds and sequester nitrogen and other nutrients and make them available to plants. Organisms in the soil also enhance soil structure and porosity as they move through the soil. Roots and percolating water follow the channels created by animal activity.

#### Relief

Relief is an important factor in soil formation because it affects drainage, aeration, and erosion.

Because relief influences runoff and drainage, it can affect the types of vegetation present and the chemical changes on and in the soil. Soil profile development occurs most rapidly in well drained, gently sloping areas. Profile development is slower on steep slopes, where runoff is rapid and the rate of water infiltration is slower. Excessive runoff reduces the amount of water that is available for leaching the soil and for use by plants, and it can increase the hazard of erosion. Differences in relief can account for the formation of different soils in similar kinds of parent material. For example, some soils in the county formed in similar kinds of parent material but have different drainage classes because they are in different positions on the landscape.

Oesterle and other somewhat poorly drained soils have redoximorphic features in the subsoil because of seasonal wetness. These soils commonly are less sloping and have a slower rate of surface runoff than the well drained soils. They are also lower on the landscape and typically receive runoff from the adjacent uplands.

Minocqua and other poorly drained and very poorly drained soils are in the lowest positions on the landscape, where runoff is very slow or ponded. They have a grayish subsoil as a result of prolonged saturation and poor aeration. The surface layer generally is darker and thicker than that of upland soils because the moisture content is more favorable for the accumulation of organic material.

In areas where accumulations of decomposing plant residue are thicker because of excessive wetness, organic soils have formed. Beseman, Cathro, and Markey soils are examples of soils that formed in organic material 16 to 51 inches thick over mineral deposits. Greenwood and Seelyeville soils are examples of soils that formed in organic material more than 51 inches thick.

#### Time

Time is required for the formation of soil. In most cases, the longer the other factors of soil formation have been allowed to act on the parent material, the more profile development can occur. Soils that are forming in parent material that has been deposited relatively recently, such as Fordum, Totagatic, and Winterfield soils, show very little profile development.

In upland areas that support woodland vegetation, the soils that have developed are characterized by organic matter that was produced by the decay of leaves, limbs, and trunks. This decay produced acids that percolated through the surface litter and into the soil and increased the mobility of clay, organic material, and oxides, which allowed these substances to be leached away or to accumulate in the subsoil. Over a period of time, clay, organic matter, and oxides were removed from the surface layer and a thin

bleached subsurface layer formed just below it. The clay, organic matter, and oxides accumulated in the subsoil horizons below this subsurface layer in the form of thin films on individual soil particles, on peds, and along cracks and pores. Freeon soils are examples of soils that formed in an area of woodland vegetation.

#### Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999 and 2003). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 1 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Alfisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Aqualf (*Aqu*, meaning water, plus *alf*, from Alfisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Epiaqualfs (*Epi*, meaning on or above, plus *aqualf*, the suborder of the Alfisols that has an aquic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. An example is Mollic Epiagualfs.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-silty, mixed, superactive, frigid Mollic Epiaqualfs.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. An example is the Barronett series.

The Official Series Descriptions (OSDs) provide the most current information about the series mapped in Washburn County. These descriptions are available on the Web at http://soils.usda.gov.

Table 1.--Classification of the Soils

Soil name	Family or higher taxonomic class
Aftad	Coarse-loamy, mixed, superactive, frigid Oxyaquic Glossudalfs
	Coarse-loamy, mixed, superactive, frigid Haplic Glossudalfs
_	Fine-silty over sandy or sandy-skeletal, mixed, superactive, frigid Haplic Glossudalfs
_	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Haplic Glossudalfs
	Sandy, mixed, frigid Typic Endoaquods
usable	Sandy, mixed, frigid Histic Humaquepts
Sarronett	Fine-silty, mixed, superactive, frigid Mollic Epiaqualfs
Beseman	Loamy, mixed, dysic, frigid Terric Haplosaprists
Billyboy	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Oxyaquic Glossudalf
Bowstring	Euic, frigid Fluvaquentic Haplosaprists
	Fine-silty over sandy or sandy-skeletal, mixed, superactive, frigid Haplic Glossudalfs
_	Coarse-loamy, mixed, superactive, frigid Mollic Epiaqualfs
	Loamy, mixed, euic, frigid Terric Haplosaprists
	Coarse-loamy, mixed, superactive, frigid Inceptic Hapludalfs
	Fine-silty, mixed, superactive, frigid Aquic Glossudalfs
	Sandy, mixed, frigid Humic Dystrudepts
	Sandy, mixed, frigid Oxyaquic Haplorthods
_	Fine-silty, mixed, superactive, frigid Oxyaquic Glossudalfs
	Sandy, mixed, frigid Oxyaquic Haplorthods
	Sandy or sandy-skeletal, mixed, dysic, frigid Terric Haplosaprists
_	Clayey, smectitic, frigid Arenic Albaqualfs
	Coarse-loamy, mixed, superactive, frigid Udollic Epiaqualfs
	Sandy, mixed, frigid Typic Epiaquods
	Coarse-loamy, mixed, superactive, nonacid, frigid Mollic Fluvaquents Coarse-loamy, mixed, superactive, frigid Oxyaquic Glossudalfs
	Sandy, mixed, frigid Arenic Hapludalfs
	Mixed, frigid Typic Udipsamments
_	Coarse-loamy, mixed, superactive, frigid Oxyaquic Glossudalfs
_	Coarse-loamy, mixed, superactive, frigid Aquic Glossudalfs
_	Mixed, frigid Lamellic Udipsamments
_	Mixed, frigid Typic Udipsamments
	Dysic, frigid Typic Haplohemists
	Mixed, frigid Lamellic Udipsamments
	Coarse-loamy, mixed, superactive, frigid Oxyaquic Glossudalfs
_	Very-fine, smectitic, frigid Oxyaquic Hapludalfs
_	Sandy, mixed, frigid Alfic Haplorthods
enroot	Mixed, frigid Oxyaquic Udipsamments
oxley	Dysic, frigid Typic Haplosaprists
upton	Euic, frigid Typic Haplosaprists
fagnor	Coarse-loamy, mixed, superactive, frigid Aquic Glossudalfs
lagroc	Coarse-loamy, mixed, superactive, frigid Aquic Glossudalfs
Mahtomedi	Mixed, frigid Typic Udipsamments
fanitowish	Sandy, mixed, frigid Oxyaquic Haplorthods
farkey	Sandy or sandy-skeletal, mixed, euic, frigid Terric Haplosaprists
feehan	Mixed, frigid Aquic Udipsamments
feenon	Clayey, smectitic, frigid Aquic Arenic Hapludalfs
_	Mixed, frigid Typic Udipsamments
_	Coarse-loamy, mixed, superactive, frigid Entic Haplorthods
_	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid, frigid Typic
	Endoaquepts
	Mixed, frigid Humaqueptic Psammaquents
	Coarse-loamy, mixed, superactive, frigid Aquic Glossudalfs
	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Aquic Glossudalfs
	Coarse-loamy, mixed, superactive, frigid Alfic Haplorthods
	Coarse-loamy, mixed, superactive, frigid Alfic Epiaquods
	Sandy, isotic, frigid Typic Haplorthods
	Mixed, frigid Aquic Udipsamments
	Clayey, smectitic, frigid Arenic Hapludalfs
	Coarse-loamy, mixed, superactive, frigid Aquic Glossudalfs
	Fine-silty over sandy or sandy-skeletal, mixed, superactive, frigid Aquic Glossudalfs Fine-silty over sandy or sandy-skeletal, mixed, superactive, frigid Mollic Endoaqualfs
	rine-silly over samov or samov-skerelar, mixed, Suberactive, Iridio Mollic Endoadualis
ifle	Euic, frigid Typic Haplohemists Coarse-loamy, mixed, superactive, frigid Haplic Glossudalfs

Table 1.--Classification of the Soils--Continued

Soil name	Family or higher taxonomic class			
Scoba	  Coarse-loamy, mixed, superactive, frigid Haplic Glossudalfs			
Sconsin	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Haplic Glossudalfs			
Scott Lake	Coarse-loamy, mixed, superactive, frigid Oxyaquic Glossudalfs			
Seelyeville	Euic, frigid Typic Haplosaprists			
Sissabagama	Mixed, frigid Oxyaquic Udipsamments			
Slimlake	Sandy, mixed, frigid Oxyaquic Dystrudepts			
Spoonerhill	Sandy, mixed, frigid Oxyaquic Dystrudepts			
Stanberry	Coarse-loamy, isotic, superactive, frigid Alfic Oxyaquic Haplorthods			
Stinnett	Coarse-loamy, mixed, superactive, frigid Aquic Glossudalfs			
Tacoosh	Loamy, mixed, euic, frigid Terric Haplohemists			
Tawas	Sandy or sandy-skeletal, mixed, euic, frigid Terric Haplosaprists			
Tipler	Coarse-loamy, mixed, superactive, frigid Alfic Oxyaquic Haplorthods			
Totagatic	Sandy, mixed, frigid Mollic Fluvaquents			
Vilas	Sandy, mixed, frigid Entic Haplorthods			
Winterfield	Mixed, frigid Aquic Udipsamments			
Worcester	Coarse-loamy, mixed, superactive, frigid Argic Endoaquods			
Wozny	Coarse-loamy, mixed, superactive, frigid Umbric Epiaqualfs			
Wurtsmith	Mixed, frigid Oxyaquic Udipsamments			

### Soil Map Unit Descriptions

The map units delineated on the soil maps in this survey represent the soils or miscellaneous areas in the survey area. These soils or miscellaneous areas are listed as individual components in the map unit descriptions. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses. More information about each map unit is provided in the tables (see Contents).

A map unit delineation on the soil maps represents an area on the landscape. It is identified by differences in the properties and taxonomic classification of components and by the percentage of each component in the map unit.

Components that are dissimilar, or contrasting, are identified in the map unit description. Dissimilar components are those that have properties and behavioral characteristics divergent enough from those of the major components to affect use or to require different management. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps.

Components that are similar to the major components (noncontrasting) are not identified in the map unit description. Similar components are those that have properties and behavioral characteristics similar enough to those of the major components that they do not affect use or require different management.

The presence of multiple components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into segments that have similar use and management requirements. The delineation of such landscape segments on the map provides sufficient information for the development of resource plans, but if intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol is used for each map unit on the soil maps. This symbol precedes the map unit name in the map unit descriptions. Each description includes general information about the unit. The map unit descriptions include representative values in feet and the months in which a wet zone (a zone in which the soil moisture status is wet) is highest and lowest in the soil profile and ponding is shallowest and deepest on the soil surface. The descriptions also include the frequency of flooding (if it occurs) and the months in which flooding is most frequent and least frequent. Tables 26, 27, and 28 provide a complete display of this data for every month of the year. The available water capacity given in each map unit description is calculated for all horizons in the upper 60 inches of the soil profile. The organic matter content displayed in each map unit description is calculated for all horizons in the upper 10 inches of the soil profile, except those that represent the surface duff layer on forested soils. Table 24 provides a complete display of available water capacity and organic matter content by horizon.

The principal hazards and limitations to be considered in planning for specific uses are described in other sections of this survey.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer or of the underlying layers, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer or of the underlying layers. They also can differ in slope, stoniness, salinity, wetness, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. The name of a soil phase commonly indicates a feature that affects use or management. For example, Stanberry sandy loam, 1 to 6 percent slopes, very stony, is a phase of the Stanberry series.

A map unit is named for the component or components that make up a dominant percentage of the map unit. Many map units consist of one dominant component. These map units are consociations. Stinnett silt loam, 0 to 4 percent slopes, very stony, is an example.

Some map units are made up of two or more dominant components. These map units are complexes or undifferentiated groups.

A *complex* consists of two or more components in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. Attempting to delineate the individual components of a complex would result in excessive clutter that could make the map illegible. The pattern and proportion of the components in a complex are somewhat similar in all areas. Haugen, very stony-Greenwood complex, 0 to 15 percent slopes, is an example.

An undifferentiated group is made up of two or more components that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the components in a mapped area are not uniform. An area can be made up of only one of the dominant components, or it can be made up of all of them. Seelyeville and Markey soils, 0 to 1 percent slopes, is an undifferentiated group in this survey area.

This survey includes miscellaneous areas. Such areas have little or no soil material and support little or no vegetation. Map unit 2015, Pits, is an example.

Table 2 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

## 3A—Totagatic-Bowstring-Ausable complex, 0 to 2 percent slopes, frequently flooded

#### Component Description

#### Totagatic and similar soils

Extent: 30 to 60 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Mostly sandy alluvium

Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (April, May, November, December)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July, August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 5.4 inches Content of organic matter in the upper 10 inches: 28.2 percent

Typical profile:

Oa—0 to 4 inches; muck

Bw1—4 to 8 inches; loamy fine sand Bw2—8 to 17 inches; fine sand Cg1—17 to 28 inches; fine sand Cg2—28 to 46 inches; sand

C—46 to 70 inches; sand C'g—70 to 80 inches; sand

#### **Bowstring and similar soils**

Extent: 15 to 60 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Highly decomposed organic material that is stratified with thin layers of sandy or loamy material

Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (April, May, November, December)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, December Deepest ponding: 0.5 foot (April, May, November)

Available water capacity to a depth of 60 inches: 21.0 inches Content of organic matter in the upper 10 inches: 80.0 percent

Typical profile:

Oa—0 to 38 inches; muck Cg—38 to 47 inches; fine sand O'a—47 to 80 inches; muck

#### Ausable and similar soils

Extent: 15 to 40 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Sandy alluvium with thin layers of organic material

Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, December

Deepest ponding: 0.5 foot (April, May, November)

Available water capacity to a depth of 60 inches: 6.9 inches Content of organic matter in the upper 10 inches: 70.0 percent

Typical profile:

Oa—0 to 10 inches; muck Cg—10 to 60 inches; sand

#### Minor Dissimilar Components

Winterfield soils

Extent: 0 to 10 percent of the mapped areas

Moquah soils

Extent: 0 to 5 percent of the mapped areas

Water

Extent: 0 to 5 percent of the mapped areas

#### 22A—Comstock silt loam, 0 to 3 percent slopes

#### **Component Description**

#### Comstock and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces Position on the landform: Footslopes and summits

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained Parent material: Silty lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 5.0 feet (September)

Ponding: None

Available water capacity to a depth of 60 inches: 11.4 inches Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap—0 to 8 inches; silt loam E—8 to 15 inches; silt loam B/E—15 to 21 inches; silt loam Bt—21 to 34 inches; silt loam

BC—34 to 44 inches; stratified silt loam to very fine sand C—44 to 60 inches; stratified silt loam to very fine sand

#### Minor Dissimilar Components

#### Barronett soils

Extent: 0 to 10 percent of the mapped areas

#### **Crystal Lake soils**

Extent: 0 to 10 percent of the mapped areas

#### 24A—Poskin silt loam, 0 to 3 percent slopes

#### Component Description

#### Poskin and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Loess or silty alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 8.7 inches Content of organic matter in the upper 10 inches: 2.8 percent

Typical profile:

Ap—0 to 9 inches; silt loam E—9 to 12 inches; silt loam E/B—12 to 19 inches; silt loam Bt1—19 to 36 inches; silt loam 2Bt2—36 to 39 inches; sandy loam

3C-39 to 60 inches; stratified sand to very gravelly coarse sand

#### Minor Dissimilar Components

#### Brander soils

Extent: 0 to 10 percent of the mapped areas

#### **Brill soils**

Extent: 0 to 10 percent of the mapped areas

#### Rib soils

Extent: 0 to 10 percent of the mapped areas

#### 27A—Scott Lake sandy loam, 0 to 3 percent slopes

#### **Component Description**

#### Scott Lake and similar soils

Extent: 90 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: 5.5 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 4.6 inches Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap—0 to 10 inches; sandy loam E/B—10 to 17 inches; sandy loam B/E—17 to 24 inches; sandy loam

2Bt—24 to 31 inches; gravelly loamy sand

2C-31 to 80 inches; stratified sand to very gravelly coarse sand

#### Minor Dissimilar Components

#### Oesterle soils

Extent: 0 to 5 percent of the mapped areas

#### **Rosholt soils**

Extent: 0 to 5 percent of the mapped areas

## 28B—Haugen-Rosholt complex, 2 to 6 percent slopes, very stony

#### Component Description

#### Haugen, very stony, and similar soils

Extent: 20 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 4 inches; sandy loam Bw1—4 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam

E/B—23 to 35 inches; gravelly sandy loam

B/E—35 to 49 inches; sandy loam Bt—49 to 79 inches; gravelly sandy loam

Cd-79 to 80 inches; gravelly sandy loam

#### Haugen and similar soils

Extent: 15 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.6 percent

Typical profile:

Ap—0 to 7 inches; sandy loam Bw1—7 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam

E/B—23 to 35 inches; gravelly sandy loam B/F—35 to 49 inches; sandy loam

B/E—35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam Cd—79 to 80 inches; gravelly sandy loam

Rosholt, very stony, and similar soils

Extent: 10 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.6 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; sandy loam E—4 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt—28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

#### Rosholt and similar soils

Extent: 10 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

#### Minor Dissimilar Components

#### Amery soils

Extent: 0 to 10 percent of the mapped areas

#### Scott Lake soils

Extent: 0 to 10 percent of the mapped areas

#### Aftad soils

Extent: 0 to 5 percent of the mapped areas

#### Glendenning soils

Extent: 0 to 5 percent of the mapped areas

#### Capitola soils

Extent: 0 to 5 percent of the mapped areas

#### Oesterle soils

Extent: 0 to 5 percent of the mapped areas

## 28C—Haugen-Rosholt complex, 6 to 12 percent slopes, very stony

#### Component Description

#### Haugen, very stony, and similar soils

Extent: 25 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 4 inches; sandy loam Bw1—4 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam

E/B—23 to 35 inches; gravelly sandy loam

B/E—35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam

Cd—79 to 80 inches; gravelly sandy loam

#### Haugen and similar soils

Extent: 10 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.6 percent Typical profile:

Ap—0 to 7 inches; sandy loam

Bw1—7 to 15 inches; sandy loam Bw2—15 to 23 inches; gravelly sandy loam

E/B—23 to 35 inches; gravelly sandy loam

 $\ensuremath{\mathrm{B/E}}\xspace-35$  to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam Cd—79 to 80 inches; gravelly sandy loam

Rosholt, very stony, and similar soils

Extent: 10 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.6 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; sandy loam E—4 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

#### Rosholt and similar soils

Extent: 10 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

#### Minor Dissimilar Components

#### Amery soils

Extent: 0 to 10 percent of the mapped areas

#### Freeon soils

Extent: 0 to 10 percent of the mapped areas

#### Aftad soils

Extent: 0 to 5 percent of the mapped areas

#### Capitola soils

Extent: 0 to 5 percent of the mapped areas

#### Mahtomedi soils

Extent: 0 to 5 percent of the mapped areas

#### **Scott Lake soils**

Extent: 0 to 5 percent of the mapped areas

#### 33B—Chetek sandy loam, 1 to 6 percent slopes

#### Component Description

#### Chetek and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Backslopes and summits

Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.5 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; sandy loam Bt—10 to 16 inches; sandy loam

2Bt—16 to 20 inches; gravelly loamy sand

2C-20 to 60 inches; stratified very gravelly coarse sand to sand

#### Minor Dissimilar Components

#### **Rosholt soils**

Extent: 0 to 10 percent of the mapped areas

#### **Cress soils**

Extent: 0 to 5 percent of the mapped areas

#### Mahtomedi soils

Extent: 0 to 5 percent of the mapped areas

#### **Scott Lake soils**

Extent: 0 to 5 percent of the mapped areas

#### 33C—Chetek sandy loam, 6 to 12 percent slopes

#### Component Description

#### Chetek and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.5 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; sandy loam Bt—10 to 16 inches; sandy loam

2Bt—16 to 20 inches; gravelly loamy sand

2C-20 to 60 inches; stratified very gravelly coarse sand to sand

#### Minor Dissimilar Components

#### **Rosholt soils**

Extent: 0 to 10 percent of the mapped areas

#### **Cress soils**

Extent: 0 to 5 percent of the mapped areas

#### Mahtomedi soils

Extent: 0 to 5 percent of the mapped areas

#### 38A—Rosholt sandy loam, 0 to 2 percent slopes

#### **Component Description**

#### Rosholt and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Summits Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Floodina: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C—34 to 60 inches; stratified sand to very gravelly coarse sand

#### Minor Dissimilar Components

#### Scott Lake soils

Extent: 0 to 10 percent of the mapped areas

#### Chetek soils

Extent: 0 to 5 percent of the mapped areas

#### Aftad soils

Extent: 0 to 5 percent of the mapped areas

#### 38B—Rosholt sandy loam, 2 to 6 percent slopes

#### Component Description

#### Rosholt and similar soils

Extent: 85 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Summits and backslopes

Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

#### Minor Dissimilar Components

#### Cress soils

Extent: 0 to 10 percent of the mapped areas

#### Chetek soils

Extent: 0 to 10 percent of the mapped areas

#### Antigo soils

Extent: 0 to 5 percent of the mapped areas

#### **Scott Lake soils**

Extent: 0 to 5 percent of the mapped areas

#### 38C—Rosholt sandy loam, 6 to 12 percent slopes

#### Component Description

#### Rosholt and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches

Content of organic matter in the upper 10 inches: 1.7 percent Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

#### Minor Dissimilar Components

#### Cress soils

Extent: 0 to 10 percent of the mapped areas

#### Chetek soils

Extent: 0 to 10 percent of the mapped areas

#### Antigo soils

Extent: 0 to 5 percent of the mapped areas

#### 38D—Rosholt sandy loam, 12 to 20 percent slopes

#### Component Description

#### Rosholt and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Backslopes and shoulders

Slope range: 12 to 20 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

#### Minor Dissimilar Components

#### **Cress soils**

Extent: 0 to 10 percent of the mapped areas

#### Chetek soils

Extent: 0 to 10 percent of the mapped areas

#### Antigo soils

Extent: 0 to 5 percent of the mapped areas

## 42D—Amery sandy loam, 12 to 25 percent slopes, very stony

#### Component Description

#### Amery and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 12 to 25 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.2 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw—3 to 22 inches; sandy loam E/B—22 to 34 inches; sandy loam

B/E—34 to 41 inches; gravelly sandy loam Bt1—41 to 57 inches; gravelly sandy loam

Bt2—57 to 71 inches; sandy loam Cd—71 to 80 inches; sandy loam

#### Minor Dissimilar Components

#### **Cress soils**

Extent: 0 to 10 percent of the mapped areas

#### Haugen soils

Extent: 0 to 10 percent of the mapped areas

#### Capitola soils

Extent: 0 to 5 percent of the mapped areas

#### Aftad soils

Extent: 0 to 5 percent of the mapped areas

#### 43B—Antigo silt loam, 1 to 6 percent slopes

#### Component Description

#### Antigo and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits, backslopes, and shoulders

Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loess or silty alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.3 inches

Content of organic matter in the upper 10 inches: 1.9 percent Typical profile:

Ap—0 to 9 inches; silt loam E—9 to 12 inches; silt loam B/E—12 to 19 inches; silt loam Bt1—19 to 28 inches; silt loam 2Bt2—28 to 31 inches; loam

2Bt3—31 to 33 inches; very gravelly sandy loam

3C-33 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### **Brill soils**

Extent: 0 to 10 percent of the mapped areas

#### Sconsin soils

Extent: 0 to 10 percent of the mapped areas

#### Billyboy soils

Extent: 0 to 5 percent of the mapped areas

#### Rosholt soils

Extent: 0 to 5 percent of the mapped areas

# 43C—Antigo silt loam, 6 to 15 percent slopes

## **Component Description**

#### Antigo and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Backslopes and shoulders

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loess or silty alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.3 inches Content of organic matter in the upper 10 inches: 1.9 percent

Typical profile:

Ap—0 to 9 inches; silt loam E—9 to 12 inches; silt loam B/E—12 to 19 inches; silt loam Bt1—19 to 28 inches; silt loam 2Bt2—28 to 31 inches; loam

2Bt3—31 to 33 inches; very gravelly sandy loam

3C-33 to 60 inches; stratified sand to very gravelly coarse sand

#### Minor Dissimilar Components

## Padus soils

Extent: 0 to 10 percent of the mapped areas

#### **Rosholt soils**

# 43D—Antigo silt loam, 15 to 30 percent slopes

## Component Description

#### Antigo and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains Position on the landform: Backslopes and shoulders

Slope range: 15 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loess or silty alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.3 inches Content of organic matter in the upper 10 inches: 1.9 percent

Typical profile:

Ap—0 to 9 inches; silt loam E—9 to 12 inches; silt loam B/E—12 to 19 inches; silt loam Bt1—19 to 28 inches; silt loam 2Bt2—28 to 31 inches; loam

2Bt3—31 to 33 inches; very gravelly sandy loam

3C-33 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

## Padus soils

Extent: 0 to 10 percent of the mapped areas

#### Rosholt soils

Extent: 0 to 10 percent of the mapped areas

# 48A—Brill silt loam, 0 to 3 percent slopes

## Component Description

#### **Brill and similar soils**

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Shallowest depth to wet zone: 1.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 8.0 inches Content of organic matter in the upper 10 inches: 2.3 percent

Typical profile:

Ap—0 to 7 inches; silt loam

E—7 to 11 inches; silt loam E/B—11 to 19 inches; silt loam Bt—19 to 34 inches; silt loam 2Bt—34 to 38 inches; loam

3C—38 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

## **Anigon soils**

Extent: 0 to 10 percent of the mapped areas

Poskin soils

Extent: 0 to 5 percent of the mapped areas

Rosholt soils

Extent: 0 to 5 percent of the mapped areas

# 63A—Crystal Lake silt loam, 0 to 2 percent slopes

## **Component Description**

#### Crystal Lake and similar soils

Extent: 85 to 100 percent of the mapped areas

Geomorphic setting: Kames; lake plains; stream terraces

Position on the landform: Summits

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mostly silty lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 12.4 inches Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap—0 to 8 inches; silt loam E—8 to 12 inches; silt loam B/E—12 to 20 inches; silt loam Bt—20 to 32 inches; silt loam

C-32 to 60 inches; stratified silt loam to very fine sand

#### Minor Dissimilar Components

#### Comstock soils

Extent: 0 to 15 percent of the mapped areas

# 63B—Crystal Lake silt loam, 2 to 6 percent slopes

#### Component Description

#### Crystal Lake and similar soils

Extent: 85 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces

Position on the landform: Summits, backslopes, and shoulders

Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mostly silty lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 12.4 inches Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap-0 to 8 inches; silt loam E—8 to 12 inches; silt loam B/E—12 to 20 inches; silt loam Bt—20 to 32 inches: silt loam

C—32 to 60 inches; stratified silt loam to very fine sand

## Minor Dissimilar Components

#### Aftad soils

Extent: 0 to 10 percent of the mapped areas

Comstock soils

Extent: 0 to 10 percent of the mapped areas

# 63C—Crystal Lake silt loam, 6 to 12 percent slopes

## Component Description

## Crystal Lake and similar soils

Extent: 90 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained Parent material: Mostly silty lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, July,

August, September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 12.4 inches Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap-0 to 8 inches; silt loam E-8 to 12 inches; silt loam B/E—12 to 20 inches; silt loam Bt—20 to 32 inches; silt loam

C—32 to 60 inches; stratified silt loam to very fine sand

#### Minor Dissimilar Components

## Aftad soils

# 63E—Crystal Lake silt loam, 20 to 35 percent slopes

## Component Description

#### Crystal Lake and similar soils

Extent: 90 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces Position on the landform: Backslopes and shoulders

Slope range: 20 to 35 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained Parent material: Mostly silty lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 12.4 inches Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap—0 to 8 inches; silt loam E—8 to 12 inches; silt loam B/E—12 to 20 inches; silt loam Bt—20 to 32 inches; silt loam

C-32 to 60 inches; stratified silt loam to very fine sand

## Minor Dissimilar Components

#### Antigo soils

Extent: 0 to 10 percent of the mapped areas

# 64A—Totagatic-Winterfield complex, 0 to 2 percent slopes, frequently flooded

## Component Description

## Totagatic and similar soils

Extent: 45 to 65 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Mostly sandy alluvium

Lowest frequency of flooding (if it occurs): Rare (January, February, July, August,

December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (April, May, November, December)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 5.4 inches Content of organic matter in the upper 10 inches: 28.2 percent

Typical profile:

Oa—0 to 4 inches; muck

Bw1—4 to 8 inches; loamy fine sand Bw2—8 to 17 inches; fine sand Cg1—17 to 28 inches; fine sand Cg2—28 to 46 inches; sand C—46 to 70 inches; sand C´g—70 to 80 inches; sand

#### Winterfield and similar soils

Extent: 25 to 55 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 1 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Somewhat poorly drained

Parent material: Sandy alluvium

Lowest frequency of flooding (if it occurs): Rare (January, February, December)

Highest frequency of flooding: Frequent (April) Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 3.0 feet (September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 4.4 inches Content of organic matter in the upper 10 inches: 2.2 percent

Typical profile:

A—0 to 7 inches; loamy sand C—7 to 60 inches; sand

## Minor Dissimilar Components

#### Ausable soils

Extent: 0 to 10 percent of the mapped areas

## **Bowstring soils**

Extent: 0 to 10 percent of the mapped areas

# 69B—Keweenaw-Sayner-Vilas complex, 2 to 6 percent slopes, stony

## Component Description

#### Keweenaw and similar soils

Extent: 20 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand

Bs1,Bs2—4 to 16 inches; loamy sand Bs3—16 to 20 inches; loamy sand E´—20 to 27 inches; loamy sand E/B—27 to 43 inches; sand B/E—43 to 75 inches; loamy sand C—75 to 80 inches; loamy sand

#### Sayner and similar soils

Extent: 20 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 7 inches; loamy sand Bs2—7 to 14 inches; sand

BC—14 to 22 inches; gravelly sand

C—22 to 60 inches; stratified sand to very gravelly coarse sand

#### Vilas and similar soils

Extent: 10 to 30 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 11 inches; loamy sand Bs2—11 to 23 inches; sand B—23 to 32 inches; sand C—32 to 80 inches; sand

#### Minor Dissimilar Components

#### Pence soils

# 69C—Keweenaw-Sayner-Vilas complex, 6 to 15 percent slopes, stony

## Component Description

#### Keweenaw and similar soils

Extent: 20 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand

Bs1,Bs2—4 to 16 inches; loamy sand Bs3—16 to 20 inches; loamy sand E´—20 to 27 inches; loamy sand E/B—27 to 43 inches; sand B/E—43 to 75 inches; loamy sand

C—75 to 80 inches; loamy sand

## Sayner and similar soils

Extent: 20 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 7 inches; loamy sand Bs2—7 to 14 inches; sand

BC—14 to 22 inches; gravelly sand

C-22 to 60 inches; stratified sand to very gravelly coarse sand

#### Vilas and similar soils

Extent: 10 to 30 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 11 inches; loamy sand Bs2—11 to 23 inches; sand B—23 to 32 inches; sand C—32 to 80 inches; sand

## Minor Dissimilar Components

#### Pence soils

Extent: 0 to 15 percent of the mapped areas

# 69E—Keweenaw-Sayner-Vilas complex, 15 to 45 percent slopes, stony

## Component Description

#### Keweenaw and similar soils

Extent: 20 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand

Bs1,Bs2—4 to 16 inches; loamy sand Bs3—16 to 20 inches; loamy sand E´—20 to 27 inches; loamy sand E/B—27 to 43 inches; sand

B/E—43 to 75 inches; loamy sand C—75 to 80 inches; loamy sand

#### Sayner and similar soils

Extent: 20 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 7 inches; loamy sand Bs2—7 to 14 inches; sand

BC—14 to 22 inches; gravelly sand

C-22 to 60 inches; stratified sand to very gravelly coarse sand

#### Vilas and similar soils

Extent: 10 to 30 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.5 percent Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 11 inches; loamy sand Bs2—11 to 23 inches; sand B—23 to 32 inches; sand C—32 to 80 inches; sand

## Minor Dissimilar Components

#### Pence soils

Extent: 0 to 15 percent of the mapped areas

# 74B—Vilas loamy sand, 0 to 6 percent slopes

## Component Description

## Vilas and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains; outwash terraces

Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.5 percent

## Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 11 inches; loamy sand Bs2—11 to 23 inches; sand BC—23 to 32 inches; sand C—32 to 80 inches; sand

## Minor Dissimilar Components

#### Croswell soils

Extent: 0 to 10 percent of the mapped areas

#### Karlin soils

Extent: 0 to 10 percent of the mapped areas

# 74C—Vilas loamy sand, 6 to 15 percent slopes

## Component Description

#### Vilas and similar soils

Extent: 90 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains; outwash terraces Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 11 inches; loamy sand Bs2—11 to 23 inches; sand BC—23 to 32 inches; sand C—32 to 80 inches; sand

## Minor Dissimilar Components

#### Karlin soils

Extent: 0 to 10 percent of the mapped areas

# 74D—Vilas loamy sand, 15 to 30 percent slopes

#### Component Description

#### Vilas and similar soils

Extent: 90 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains; outwash terraces Position on the landform: Shoulders and backslopes

Slope range: 15 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 11 inches; loamy sand Bs2—11 to 23 inches; sand BC—23 to 32 inches; sand C—32 to 80 inches; sand

## Minor Dissimilar Components

#### Karlin soils

Extent: 0 to 10 percent of the mapped areas

# 100B—Menahga sand, 0 to 6 percent slopes

## Component Description

#### Menahga and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Summits

Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A—0 to 2 inches; sand Bw—2 to 25 inches; sand C—25 to 80 inches; sand

## Minor Dissimilar Components

#### Friendship soils

Extent: 0 to 15 percent of the mapped areas

## Graycalm soils

Extent: 0 to 5 percent of the mapped areas

# 100C—Menahga sand, 6 to 12 percent slopes

#### Component Description

#### Menahga and similar soils

Geomorphic setting: Outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 0.3 percent

Typical profile:

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; sand Bw—2 to 25 inches; sand C—25 to 80 inches; sand

## Minor Dissimilar Components

## Graycalm soils

Extent: 0 to 15 percent of the mapped areas

#### Friendship soils

Extent: 0 to 3 percent of the mapped areas

# 100D—Menahga sand, 12 to 30 percent slopes

## **Component Description**

## Menahga and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Backslopes and shoulders

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 0.3 percent

Typical profile:

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; sand Bw—2 to 25 inches; sand C—25 to 80 inches; sand

#### Minor Dissimilar Components

#### Gravcalm soils

Extent: 0 to 10 percent of the mapped areas

## **Grettum soils**

# 127D—Amery-Rosholt complex, 12 to 20 percent slopes, very stony

## Component Description

## Amery and similar soils

Extent: 40 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 12 to 20 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.2 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw—3 to 22 inches; sandy loam E/B—22 to 34 inches; sandy loam

B/E—34 to 41 inches; gravelly sandy loam Bt1—41 to 57 inches; gravelly sandy loam

Bt2—57 to 71 inches; sandy loam Cd—71 to 80 inches; sandy loam

## Rosholt and similar soils

Extent: 15 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 12 to 20 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.6 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; sandy loam E—4 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt—28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

#### Minor Dissimilar Components

#### Cress soils

Extent: 0 to 10 percent of the mapped areas

## Mahtomedi soils

## Haugen soils

Extent: 0 to 5 percent of the mapped areas

#### Capitola soils

Extent: 0 to 5 percent of the mapped areas

# 127E—Amery-Rosholt complex, 20 to 45 percent slopes, very stony

#### Component Description

## Amery and similar soils

Extent: 40 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 20 to 45 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.2 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw—3 to 22 inches; sandy loam E/B—22 to 34 inches; sandy loam

B/E—34 to 41 inches; gravelly sandy loam Bt1—41 to 57 inches; gravelly sandy loam

Bt2—57 to 71 inches; sandy loam Cd—71 to 80 inches; sandy loam

#### Rosholt and similar soils

Extent: 20 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 20 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.6 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; sandy loam E—4 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt—28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

Cress soils

Extent: 0 to 15 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

Haugen soils

Extent: 0 to 5 percent of the mapped areas

# 156B—Magnor, very stony-Magnor complex, 0 to 4 percent slopes

## Component Description

Magnor, very stony, and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; silt loam E—4 to 11 inches; silt loam E/B—11 to 16 inches; silt loam B/E—16 to 21 inches; silt loam

2Bt1,2Bt2—21 to 39 inches; sandy loam 2Bt3—39 to 58 inches; fine sandy loam 2Cd—58 to 60 inches; fine sandy loam

#### Magnor and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.7 percent

## Typical profile:

Ap—0 to 8 inches; silt loam E—8 to 11 inches; silt loam E/B—11 to 16 inches; silt loam B/E—16 to 21 inches; silt loam

2Bt1,2Bt2—21 to 39 inches; sandy loam 2Bt3—39 to 58 inches; fine sandy loam 2Cd—58 to 60 inches; fine sandy loam

## Minor Dissimilar Components

## Freeon, very stony, soils

Extent: 0 to 15 percent of the mapped areas

#### Freeon soils

Extent: 0 to 10 percent of the mapped areas

## Capitola soils

Extent: 0 to 10 percent of the mapped areas

# 157B—Freeon, very stony-Freeon complex, 2 to 6 percent slopes

## Component Description

## Freeon, very stony, and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Footslopes and summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September)
Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; silt loam E/B—4 to 19 inches; silt loam 2B/E—19 to 39 inches; sandy loam 2Bt—39 to 53 inches; sandy loam 2BCd—53 to 80 inches; sandy loam

### Freeon and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Footslopes and summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)

Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

Ap—0 to 4 inches; silt loam E/B—4 to 19 inches; silt loam 2B/E—19 to 39 inches; sandy loam 2Bt—39 to 53 inches; sandy loam 2BCd—53 to 80 inches; sandy loam

## Minor Dissimilar Components

## Magnor, very stony, soils

Extent: 0 to 10 percent of the mapped areas

Magnor soils

Extent: 0 to 10 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

Haugen soils

Extent: 0 to 4 percent of the mapped areas

# 157C—Freeon, very stony-Freeon complex, 6 to 12 percent slopes

## **Component Description**

## Freeon, very stony, and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September) Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; silt loam E/B—4 to 19 inches; silt loam 2B/E—19 to 39 inches; sandy loam 2Bt—39 to 53 inches; sandy loam 2BCd—53 to 80 inches; sandy loam

#### Freeon and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September) Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

Ap—0 to 4 inches; silt loam E/B—4 to 19 inches; silt loam 2B/E—19 to 39 inches; sandy loam 2Bt—39 to 53 inches; sandy loam 2BCd—53 to 80 inches; sandy loam

## Minor Dissimilar Components

#### Magnor, very stony, soils

Extent: 0 to 10 percent of the mapped areas

Magnor soils

Extent: 0 to 10 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

Haugen soils

Extent: 0 to 4 percent of the mapped areas

# 160A—Oesterle sandy loam, 0 to 2 percent slopes

## Component Description

#### Oesterle and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 5.3 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 7 inches; sandy loam E/B—7 to 11 inches; sandy loam Bt—11 to 31 inches; sandy loam

2C-31 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

## Minocqua soils

Extent: 0 to 10 percent of the mapped areas

Scott Lake soils

Extent: 0 to 10 percent of the mapped areas

# 182B—Padus sandy loam, 0 to 6 percent slopes

## Component Description

#### Padus and similar soils

Extent: 60 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces; eskers *Position on the landform:* Summits, backslopes, and shoulders

Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 6.0 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 26 inches; sandy loam B/E—26 to 38 inches; sandy loam

2C-38 to 60 inches; stratified sand to very gravelly coarse sand

#### Minor Dissimilar Components

### Pence soils

Extent: 0 to 15 percent of the mapped areas

## Antigo soils

Extent: 0 to 10 percent of the mapped areas

#### Tipler soils

Extent: 0 to 10 percent of the mapped areas

#### Martha soils

Extent: 0 to 5 percent of the mapped areas

# 182C—Padus sandy loam, 6 to 15 percent slopes

#### Component Description

#### Padus and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Eskers; outwash plains; stream terraces

Position on the landform: Backslopes and shoulders

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 6.0 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 26 inches; sandy loam B/E—26 to 38 inches; sandy loam

2C-38 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Pence soils

Extent: 0 to 15 percent of the mapped areas

## **Antigo soils**

Extent: 0 to 10 percent of the mapped areas

#### Martha soils

Extent: 0 to 5 percent of the mapped areas

# 192A—Worcester sandy loam, 0 to 3 percent slopes

## Component Description

#### Worcester and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 5.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 3 inches; sandy loam Bhs—3 to 6 inches; sandy loam Bs—6 to 16 inches; sandy loam B/E—16 to 20 inches; sandy loam Bt1—20 to 32 inches; sandy loam

2Bt2—32 to 39 inches; gravelly loamy sand

2C—39 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

## Minocqua soils

## Tipler soils

Extent: 0 to 15 percent of the mapped areas

## 193A—Minocqua muck, 0 to 2 percent slopes

## **Component Description**

#### Minocqua and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on outwash plains; depressions

and drainageways on stream terraces

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Silty and loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 6.2 inches Content of organic matter in the upper 10 inches: 18.6 percent

Typical profile:

Oe—0 to 4 inches; muck Eg—4 to 15 inches; silt loam 2Bg—15 to 28 inches; loam

3C-28 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Cathro soils

Extent: 0 to 10 percent of the mapped areas

#### Oesterle soils

Extent: 0 to 10 percent of the mapped areas

### Worcester soils

Extent: 0 to 10 percent of the mapped areas

#### Minocqua soils that are flooded for brief periods

Extent: 0 to 5 percent of the mapped areas

# 215B—Pence sandy loam, 0 to 6 percent slopes

## Component Description

#### Pence and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Summits, shoulders, and backslopes

Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Padus soils

Extent: 0 to 15 percent of the mapped areas

#### Manitowish soils

Extent: 0 to 10 percent of the mapped areas

## Sayner soils

Extent: 0 to 10 percent of the mapped areas

# 215C—Pence sandy loam, 6 to 15 percent slopes

## **Component Description**

#### Pence and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains Position on the landform: Backslopes and shoulders

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Padus soils

Extent: 0 to 15 percent of the mapped areas

### Sayner soils

# 215D—Pence sandy loam, 15 to 30 percent slopes

## Component Description

#### Pence and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains Position on the landform: Backslopes and shoulders

Slope range: 15 to 30 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Padus soils

Extent: 0 to 15 percent of the mapped areas

#### Pelissier soils

Extent: 0 to 5 percent of the mapped areas

#### Savner soils

Extent: 0 to 5 percent of the mapped areas

# 315A—Rib silt loam, 0 to 2 percent slopes

## Component Description

#### Rib and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on stream terraces;

drainageways and depressions on outwash plains

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Loess or silty alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 8.3 inches

Content of organic matter in the upper 10 inches: 4.8 percent Typical profile:

A—0 to 7 inches; silt loam Eg—7 to 10 inches; silt loam Btg1—10 to 32 inches; silt loam 2Btg2—32 to 35 inches; loam

3BC-35 to 37 inches; gravelly loamy sand

3C-37 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Cathro soils

Extent: 0 to 10 percent of the mapped areas

#### Poskin soils

Extent: 0 to 10 percent of the mapped areas

## Rib soils that are flooded for brief periods

Extent: 0 to 5 percent of the mapped areas

# 337A—Plover fine sandy loam, 0 to 3 percent slopes

## **Component Description**

#### Plover and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Stratified loamy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)
Deepest depth to wet zone: 5.0 feet (September)

Ponding: None

Available water capacity to a depth of 60 inches: 9.8 inches Content of organic matter in the upper 10 inches: 2.5 percent Typical profile:

Ap—0 to 10 inches; fine sandy loam E—10 to 13 inches; fine sandy loam B/E—13 to 18 inches; fine sandy loam Bt—18 to 32 inches; fine sandy loam

C-32 to 60 inches; stratified fine sand to silt

## Minor Dissimilar Components

#### Aftad soils

Extent: 0 to 10 percent of the mapped areas

#### Fenander soils

Extent: 0 to 10 percent of the mapped areas

#### Comstock soils

Extent: 0 to 5 percent of the mapped areas

## Oesterle soils

# 368B—Mahtomedi-Cress complex, 2 to 6 percent slopes

## Component Description

#### Mahtomedi and similar soils

Extent: 30 to 80 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A-0 to 5 inches; loamy sand

E—5 to 8 inches; sand

Bw1-8 to 15 inches; gravelly coarse sand

Bw2—15 to 30 inches; gravelly sand

C—30 to 60 inches; gravelly sand

#### Cress and similar soils

Extent: 15 to 60 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3-31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

## Graycalm soils

Extent: 0 to 10 percent of the mapped areas

#### Grettum soils

Extent: 0 to 5 percent of the mapped areas

#### Haugen soils

# 368C—Mahtomedi-Cress complex, 6 to 12 percent slopes

## Component Description

#### Mahtomedi and similar soils

Extent: 20 to 80 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A-0 to 5 inches; loamy sand

E-5 to 8 inches; sand

Bw1-8 to 15 inches; gravelly coarse sand

Bw2—15 to 30 inches; gravelly sand C—30 to 60 inches; gravelly sand

#### Cress and similar soils

Extent: 15 to 60 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3-31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

## Graycalm soils

Extent: 0 to 10 percent of the mapped areas

#### Haugen soils

Extent: 0 to 10 percent of the mapped areas

## **Grettum soils**

# 368D—Mahtomedi-Cress complex, 12 to 25 percent slopes

## Component Description

## Mahtomedi and similar soils

Extent: 20 to 75 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 12 to 25 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A-0 to 5 inches; loamy sand

E—5 to 8 inches; sand

Bw1-8 to 15 inches; gravelly coarse sand

Bw2—15 to 30 inches; gravelly sand C—30 to 60 inches; gravelly sand

#### Cress and similar soils

Extent: 20 to 75 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 12 to 25 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Graycalm soils

Extent: 0 to 15 percent of the mapped areas

#### **Rosholt soils**

# 371A—Croswell loamy sand, 0 to 3 percent slopes

## Component Description

#### Croswell and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Lake terraces; lake plains; outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: 5.0 feet (February, August)

Pondina: None

Available water capacity to a depth of 60 inches: 4.2 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 1 inch; loamy sand E—1 to 7 inches; loamy sand Bs—7 to 16 inches; loamy sand BC—16 to 39 inches; sand C-39 to 60 inches; sand

## Minor Dissimilar Components

#### Au Gres soils

Extent: 0 to 10 percent of the mapped areas

#### Vilas soils

Extent: 0 to 10 percent of the mapped areas

#### Savner soils

Extent: 0 to 5 percent of the mapped areas

# 380B—Cress-Rosholt complex, 2 to 6 percent slopes

## Component Description

#### Cress and similar soils

Extent: 35 to 75 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3-31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

#### Rosholt and similar soils

Extent: 25 to 65 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt—28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Scott Lake soils

Extent: 0 to 15 percent of the mapped areas

#### Mahtomedi soils

Extent: 0 to 5 percent of the mapped areas

## Aftad soils

Extent: 0 to 5 percent of the mapped areas

# 380C—Cress-Rosholt complex, 6 to 12 percent slopes

## Component Description

#### Cress and similar soils

Extent: 35 to 75 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

## Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3-31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

#### Rosholt and similar soils

Extent: 20 to 60 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt—28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Chetek soils

Extent: 0 to 15 percent of the mapped areas

#### Aftad soils

Extent: 0 to 15 percent of the mapped areas

## Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

# 380D—Cress-Rosholt complex, 12 to 25 percent slopes

## Component Description

#### Cress and similar soils

Extent: 35 to 75 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 12 to 25 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

## Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3-31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

#### Rosholt and similar soils

Extent: 20 to 60 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 12 to 25 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt—28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Chetek soils

Extent: 0 to 15 percent of the mapped areas

#### Antigo soils

Extent: 0 to 10 percent of the mapped areas

## Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

# 383B—Mahtomedi loamy sand, 0 to 6 percent slopes

## Component Description

#### Mahtomedi and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

## Typical profile:

A-0 to 5 inches; loamy sand

E—5 to 8 inches; sand

Bw1-8 to 15 inches; gravelly coarse sand

Bw2-15 to 30 inches; gravelly sand

C-30 to 60 inches; gravelly sand

## Minor Dissimilar Components

## Menahga soils

Extent: 0 to 30 percent of the mapped areas

## Graycalm soils

Extent: 0 to 15 percent of the mapped areas

#### Cress soils

Extent: 0 to 5 percent of the mapped areas

#### Lenroot soils

Extent: 0 to 5 percent of the mapped areas

# 383C—Mahtomedi loamy sand, 6 to 12 percent slopes

## Component Description

#### Mahtomedi and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A-0 to 5 inches; loamy sand

E-5 to 8 inches; sand

Bw1-8 to 15 inches; gravelly coarse sand

Bw2—15 to 30 inches; gravelly sand

C-30 to 60 inches; gravelly sand

## Minor Dissimilar Components

## Menahga soils

Extent: 0 to 30 percent of the mapped areas

#### **Graycalm soils**

Extent: 0 to 15 percent of the mapped areas

#### Cress soils

Extent: 0 to 5 percent of the mapped areas

#### Lenroot soils

# 383D—Mahtomedi loamy sand, 12 to 30 percent slopes

## Component Description

#### Mahtomedi and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A-0 to 5 inches; loamy sand

E—5 to 8 inches; sand

Bw1-8 to 15 inches; gravelly coarse sand

Bw2—15 to 30 inches; gravelly sand

C-30 to 60 inches; gravelly sand

## Minor Dissimilar Components

## Menahga soils

Extent: 0 to 30 percent of the mapped areas

## Graycalm soils

Extent: 0 to 10 percent of the mapped areas

#### Cress soils

Extent: 0 to 5 percent of the mapped areas

#### Fremstadt soils

Extent: 0 to 5 percent of the mapped areas

# 396B—Friendship-Wurtsmith-Grayling complex, 0 to 6 percent slopes

#### Component Description

#### Friendship and similar soils

Extent: 20 to 60 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained Parent material: Sandy eolian deposits

Flooding: None

Shallowest depth to wet zone: 4.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 3.6 inches

Content of organic matter in the upper 10 inches: 0.7 percent Typical profile:

A—0 to 4 inches; sand Bw—4 to 29 inches; sand C—29 to 60 inches: sand

#### Wurtsmith and similar soils

Extent: 20 to 55 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained Parent material: Sandy eolian deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: 5.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 3.7 inches Content of organic matter in the upper 10 inches: 2.2 percent

Typical profile:

A—0 to 6 inches; sand Bw—6 to 33 inches; sand C—33 to 60 inches; sand

## Grayling and similar soils

Extent: 15 to 35 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Summits Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy eolian deposits

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.8 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 3 inches; sand Bw—3 to 15 inches; sand BC—15 to 23 inches; sand C—23 to 60 inches; sand

## Minor Dissimilar Components

## Meehan soils

Extent: 0 to 5 percent of the mapped areas

# 397A—Perchlake loamy fine sand, 0 to 2 percent slopes

## Component Description

## Perchlake and similar soils

Extent: 65 to 100 percent of the mapped areas Geomorphic setting: Lake plains; outwash plains

Position on the landform: Footslopes

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Somewhat poorly drained

Parent material: Sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 4.9 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy fine sand Bw—9 to 18 inches; fine sand

E&Bt—18 to 42 inches; sand, loamy sand 2Btg—42 to 46 inches; fine sandy loam

3C-46 to 60 inches; sand

## Minor Dissimilar Components

#### Lino soils

Extent: 0 to 15 percent of the mapped areas

#### Meenon soils

Extent: 0 to 15 percent of the mapped areas

#### **Newson soils**

Extent: 0 to 10 percent of the mapped areas

# 399B—Grayling sand, 0 to 6 percent slopes

#### Component Description

#### Grayling and similar soils

Extent: 85 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy eolian deposits

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.8 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 3 inches; sand Bw—3 to 15 inches; sand BC—15 to 23 inches; sand C—23 to 60 inches; sand

## Minor Dissimilar Components

## Friendship soils

#### **Wurtsmith soils**

Extent: 0 to 5 percent of the mapped areas

# 399C—Grayling sand, 6 to 12 percent slopes

# Component Description

## Grayling and similar soils

Extent: 93 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy eolian deposits

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.8 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 3 inches; sand Bw—3 to 15 inches; sand BC—15 to 23 inches; sand C—23 to 60 inches; sand

# Minor Dissimilar Components

# Friendship similar soils

Extent: 0 to 5 percent of the mapped areas

#### **Wurtsmith soils**

Extent: 0 to 2 percent of the mapped areas

# 399D—Grayling sand, 12 to 30 percent slopes

# Component Description

# Grayling and similar soils

Extent: 93 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Backslopes and shoulders

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy eolian deposits

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.8 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 3 inches; sand Bw—3 to 15 inches; sand BC—15 to 23 inches; sand C—23 to 60 inches; sand

# Minor Dissimilar Components

Friendship soils

Extent: 0 to 5 percent of the mapped areas

**Wurtsmith soils** 

Extent: 0 to 2 percent of the mapped areas

# 405A—Lupton, Cathro, and Tawas soils, 0 to 1 percent slopes

# Component Description

# Lupton and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous and woody organic material more than 51 inches thick

Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November) Available water capacity to a depth of 60 inches: 23.9 inches Content of organic matter in the upper 10 inches: 80.0 percent

Typical profile:

Oa—0 to 65 inches; muck

#### Cathro and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick underlain by loamy

deposits Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November) Available water capacity to a depth of 60 inches: 16.6 inches Content of organic matter in the upper 10 inches: 72.5 percent

Typical profile:

Oa—0 to 28 inches; muck Cg1—28 to 49 inches; loam Cg2—49 to 60 inches; sandy loam

#### Tawas and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick over sandy deposits

Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June)

Available water capacity to a depth of 60 inches: 14.2 inches Content of organic matter in the upper 10 inches: 55.0 percent

Typical profile:

Oa—0 to 31 inches; muck Cg—31 to 60 inches; fine sand

# 406A—Loxley mucky peat, 0 to 1 percent slopes

# **Component Description**

# Loxley and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Depressions on lake plains and outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 25.2 inches Content of organic matter in the upper 10 inches: 80.0 percent

Typical profile:

Oe—0 to 13 inches; mucky peat Oa—13 to 60 inches; muck

# Minor Dissimilar Components

# Seelyeville soils

Extent: 0 to 15 percent of the mapped areas

#### Uskabwanka soils

Extent: 0 to 10 percent of the mapped areas

#### **Newson soils**

Extent: 0 to 5 percent of the mapped areas

# 407A—Seelyeville and Markey soils, 0 to 1 percent slopes

#### Component Description

#### Seelyeville and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on lake plains and outwash plains; drainageways on

outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material more than 51 inches thick

Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November)

Available water capacity to a depth of 60 inches: 23.9 inches

Content of organic matter in the upper 10 inches: 62.0 percent

Typical profile:

Oa-0 to 80 inches; muck

## Markey and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on lake plains and outwash plains; drainageways on

outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick overlying sandy

deposits Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November) Available water capacity to a depth of 60 inches: 14.4 inches Content of organic matter in the upper 10 inches: 70.0 percent

Typical profile:

Oa—0 to 32 inches; muck Cg—32 to 60 inches; sand

#### Minor Dissimilar Components

## Newson soils

Extent: 0 to 15 percent of the mapped areas

#### Dawson soils

Extent: 0 to 10 percent of the mapped areas

# 410A—Seelyeville and Cathro soils, 0 to 1 percent slopes

## Component Description

### Seelyeville and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on lake plains and outwash plains; drainageways on

outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material more than 51 inches thick

Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September, October, December

Deepest ponding: 0.5 foot (March, April, May, June, November)

Available water capacity to a depth of 60 inches: 23.9 inches

Content of organic matter in the upper 10 inches: 62.0 percent

Typical profile:

Oa-0 to 80 inches; muck

#### Cathro and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick over loamy or silty

deposits Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November)

Available water capacity to a depth of 60 inches: 16.6 inches

Content of organic matter in the upper 10 inches: 72.5 percent

Typical profile:

Oa—0 to 28 inches; muck Cg1—28 to 49 inches; loam Cg2—49 to 60 inches; sandy loam

# Minor Dissimilar Components

#### **Greenwood soils**

Extent: 0 to 15 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

Minocqua soils

Extent: 0 to 5 percent of the mapped areas

# 412A—Rifle and Tacoosh soils, 0 to 1 percent slopes

# **Component Description**

#### Rifle and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November)

Available water capacity to a depth of 60 inches: 30.3 inches Content of organic matter in the upper 10 inches: 80.0 percent Typical profile:

Oi—0 to 4 inches; peat

Oe-4 to 60 inches; mucky peat

#### Tacoosh and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick over loamy or silty

deposits Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November) Available water capacity to a depth of 60 inches: 22.2 inches Content of organic matter in the upper 10 inches: 87.0 percent Typical profile:

Oa-0 to 8 inches; muck

Oe-8 to 40 inches; mucky peat

Cg1—40 to 42 inches; very fine sandy loam

Cg2—42 to 60 inches; sandy loam

# Minor Dissimilar Components

# **Greenwood soils**

Extent: 0 to 10 percent of the mapped areas

Rib soils

Extent: 0 to 5 percent of the mapped areas

# 415A—Greenwood mucky peat, 0 to 1 percent slopes

# Component Description

# Greenwood and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 23.9 inches Content of organic matter in the upper 10 inches: 80.0 percent

Typical profile:

Oe—0 to 60 inches; mucky peat

# Minor Dissimilar Components

#### Beseman soils

Extent: 0 to 10 percent of the mapped areas

#### Capitola soils

Extent: 0 to 10 percent of the mapped areas

# 439B—Graycalm-Menahga complex, 0 to 6 percent slopes

# **Component Description**

## Graycalm and similar soils

Extent: 40 to 80 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Summits

Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.9 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 22 inches; sand E—22 to 35 inches; sand

E&Bt—35 to 60 inches; stratified sand to loamy sand

# Menahga and similar soils

Extent: 20 to 60 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 0.3 percent

Typical profile:

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; loamy sand Bw—2 to 25 inches; sand C—25 to 80 inches: sand

#### Minor Dissimilar Components

## Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

# **Cress soils**

Extent: 0 to 8 percent of the mapped areas

#### **Grettum soils**

Extent: 0 to 5 percent of the mapped areas

#### **Wurtsmith soils**

Extent: 0 to 5 percent of the mapped areas

# 439C—Graycalm-Menahga complex, 6 to 12 percent slopes

# Component Description

### Graycalm and similar soils

Extent: 40 to 80 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.9 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 22 inches; sand E—22 to 35 inches; sand

E&Bt—35 to 60 inches; stratified sand to loamy sand

# Menahga and similar soils

Extent: 20 to 60 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 0.3 percent

Typical profile:

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; loamy sand B—2 to 25 inches; sand C—25 to 80 inches; sand

#### Minor Dissimilar Components

#### Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

## **Grettum soils**

Extent: 0 to 10 percent of the mapped areas

#### Cress soils

Extent: 0 to 5 percent of the mapped areas

# 439D—Graycalm-Menahga complex, 12 to 30 percent slopes

# Component Description

# Graycalm and similar soils

Extent: 40 to 80 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.9 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 22 inches; sand E—22 to 35 inches; sand

E&Bt-35 to 60 inches; stratified sand to loamy sand

# Menahga and similar soils

Extent: 20 to 60 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 0.3 percent

Typical profile:

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; loamy sand Bw—2 to 25 inches; sand C—25 to 80 inches; sand

#### Minor Dissimilar Components

#### Mahtomedi soils

Extent: 0 to 15 percent of the mapped areas

#### **Cress soils**

Extent: 0 to 5 percent of the mapped areas

# 441C—Freeon, very stony-Cathro complex, 0 to 15 percent slopes

# Component Description

### Freeon and similar soils

Extent: 50 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September)
Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; silt loam E/B—4 to 19 inches; silt loam 2B/E—19 to 39 inches; sandy loam 2Bt—39 to 53 inches; sandy loam 2BCd—53 to 80 inches; sandy loam

#### Cathro and similar soils

Extent: 10 to 30 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material underlain by loamy deposits

Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November) Available water capacity to a depth of 60 inches: 16.6 inches Content of organic matter in the upper 10 inches: 72.5 percent Typical profile:

Oa—0 to 28 inches; muck Cg1—28 to 49 inches; loam Cg2—49 to 60 inches; sandy loam

#### Minor Dissimilar Components

## **Amery soils**

Extent: 0 to 15 percent of the mapped areas

# Magnor soils

Extent: 0 to 15 percent of the mapped areas

Capitola soils

Extent: 0 to 10 percent of the mapped areas

Haugen soils

Extent: 0 to 10 percent of the mapped areas

# 442C—Haugen, very stony-Greenwood complex, 0 to 15 percent slopes

# Component Description

## Haugen and similar soils

Extent: 30 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 2 to 15 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 4 inches; sandy loam Bw1—4 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam E/B—23 to 35 inches; gravelly sandy loam

B/E-35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam Cd—79 to 80 inches; gravelly sandy loam

#### Greenwood and similar soils

Extent: 15 to 35 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 30.5 inches Content of organic matter in the upper 10 inches: 65.0 percent

Typical profile:

Oi-0 to 6 inches; peat

Oe—6 to 60 inches; mucky peat

# Minor Dissimilar Components

### Amery soils

Extent: 0 to 15 percent of the mapped areas

Freeon soils

Extent: 0 to 10 percent of the mapped areas

Capitola soils

Extent: 0 to 6 percent of the mapped areas

Magnor soils

Extent: 0 to 5 percent of the mapped areas

# 443D—Amery, very stony-Greenwood complex, 0 to 35 percent slopes

# **Component Description**

### Amery and similar soils

Extent: 30 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 15 to 35 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.2 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw—3 to 22 inches; sandy loam E/B—22 to 34 inches; sandy loam

B/E—34 to 41 inches; gravelly sandy loam Bt1—41 to 57 inches; gravelly sandy loam

Bt2—57 to 71 inches; sandy loam Cd—71 to 80 inches; sandy loam

#### Greenwood and similar soils

Extent: 15 to 40 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July, August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 30.5 inches Content of organic matter in the upper 10 inches: 65.0 percent

Typical profile:

Oi-0 to 6 inches; peat

Oe-6 to 60 inches; mucky peat

# Minor Dissimilar Components

# Haugen soils

Extent: 0 to 15 percent of the mapped areas

## Capitola soils

Extent: 0 to 15 percent of the mapped areas

## Magnor soils

Extent: 0 to 10 percent of the mapped areas

# 461A—Bowstring muck, 0 to 1 percent slopes, frequently flooded

# **Component Description**

# Bowstring and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Highly decomposed organic material that is stratified with thin layers

of sandy or loamy material

Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, December Deepest ponding: 0.5 foot (April, May, November)

Available water capacity to a depth of 60 inches: 21.1 inches

Content of organic matter in the upper 10 inches: 80.0 percent

Typical profile:

Oa—0 to 38 inches; muck Cg—38 to 47 inches; fine sand O'a—47 to 80 inches; muck

# Minor Dissimilar Components

#### Fordum soils

Extent: 0 to 15 percent of the mapped areas

## **Totagatic soils**

Extent: 0 to 10 percent of the mapped areas

# 484A—Greenwood and Beseman soils, 0 to 1 percent slopes

# Component Description

# Greenwood and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 30.5 inches Content of organic matter in the upper 10 inches: 65.0 percent

Typical profile:

Oi—0 to 6 inches; peat

Oe-6 to 60 inches; mucky peat

### Beseman and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick over loamy till

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 18.2 inches Content of organic matter in the upper 10 inches: 50.0 percent

Typical profile:

Oa—0 to 36 inches; muck Cg—36 to 60 inches; silt loam

## Minor Dissimilar Components

### Seelyeville soils

Extent: 0 to 15 percent of the mapped areas

#### Capitola soils

Extent: 0 to 5 percent of the mapped areas

#### Minocqua soils

Extent: 0 to 3 percent of the mapped areas

# 495B—Karlsborg-Grettum-Perida complex, 1 to 6 percent slopes

# Component Description

### Karlsborg and similar soils

Extent: 30 to 60 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains

Position on the landform: Summits Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 1.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw—9 to 28 inches; sand 2Bt—28 to 48 inches; clay 3C—48 to 80 inches; sand

# Grettum and similar soils

Extent: 20 to 50 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains

Position on the landform: Summits Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash or lacustrine deposits with lamellae

Flooding: None

Shallowest depth to wet zone: 4.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 32 inches; sand E&Bt—32 to 75 inches; sand C—75 to 80 inches; sand

#### Perida and similar soils

Extent: 15 to 40 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains

Position on the landform: Summits

Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 3.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August, September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.8 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw1,Bw2,Bw3—9 to 43 inches; sand Bw4—43 to 45 inches; loamy sand 2Bt1—45 to 60 inches; clay 2Bt2—60 to 74 inches; silty clay 3C—74 to 80 inches; sand

# Minor Dissimilar Components

# Graycalm soils

Extent: 0 to 15 percent of the mapped areas

Menahga soils

Extent: 0 to 10 percent of the mapped areas

# 495C—Karlsborg-Grettum-Perida complex, 6 to 12 percent slopes

# Component Description

#### Karlsborg and similar soils

Extent: 25 to 60 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 1.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.2 percent Typical profile:

Ap—0 to 9 inches; loamy sand Bw—9 to 28 inches; sand 2Bt—28 to 48 inches; clay 3C—48 to 80 inches; sand

#### Grettum and similar soils

Extent: 20 to 50 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash or lacustrine deposits with lamellae

Flooding: None

Shallowest depth to wet zone: 4.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 32 inches; sand E&Bt—32 to 75 inches; sand C—75 to 80 inches; sand

#### Perida and similar soils

Extent: 15 to 40 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 3.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.8 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw1,Bw2,Bw3—9 to 43 inches; sand Bw4—43 to 45 inches; loamy sand 2Bt1—45 to 60 inches; clay 2Bt2—60 to 74 inches; silty clay 3C—74 to 80 inches; sand

# Minor Dissimilar Components

# Graycalm soils

Extent: 0 to 15 percent of the mapped areas

# Menahga soils

Extent: 0 to 10 percent of the mapped areas

# 495D—Karlsborg-Grettum-Perida complex, 12 to 30 percent slopes

# Component Description

## Karlsborg and similar soils

Extent: 30 to 50 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Backslopes and shoulders

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 1.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw—9 to 28 inches; sand 2Bt—28 to 48 inches; clay 3C—48 to 80 inches; sand

#### Grettum and similar soils

Extent: 20 to 40 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Backslopes and shoulders

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash or lacustrine deposits with lamellae

Flooding: None

Shallowest depth to wet zone: 4.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 32 inches; sand E&Bt—32 to 75 inches; sand C—75 to 80 inches; sand

#### Perida and similar soils

Extent: 10 to 40 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Backslopes and shoulders

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 3.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.8 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw1,Bw2,Bw3—9 to 43 inches; sand Bw4—43 to 45 inches; loamy sand 2Bt1—45 to 60 inches; clay 2Bt2—60 to 74 inches; silty clay 3C—74 to 80 inches; sand

# Minor Dissimilar Components

# Graycalm soils

Extent: 0 to 15 percent of the mapped areas

### Menahga soils

Extent: 0 to 15 percent of the mapped areas

# 497A—Meenon loamy sand, 0 to 3 percent slopes

# Component Description

#### Meenon and similar soils

Extent: 60 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April, May)

Deepest depth to wet zone: More than 6.7 feet (July, August, September)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw—9 to 28 inches; sand 2Btg—28 to 41 inches; clay 3C—41 to 80 inches; sand

#### Minor Dissimilar Components

## Karlsborg soils

Extent: 0 to 15 percent of the mapped areas

#### Chelmo soils

Extent: 0 to 10 percent of the mapped areas

## **Grettum soils**

Extent: 0 to 5 percent of the mapped areas

#### Perchlake soils

Extent: 0 to 5 percent of the mapped areas

### Dody soils

Extent: 0 to 5 percent of the mapped areas

# 515A—Manitowish sandy loam, 0 to 3 percent slopes

# Component Description

#### Manitowish and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: 5.5 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 4.2 inches Content of organic matter in the upper 10 inches: 1.6 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 4 inches; sandy loam Bs1—4 to 16 inches; sandy loam

2Bs2—16 to 19 inches; loamy coarse sand

2C—19 to 60 inches; stratified sand to very gravelly coarse sand

#### Minor Dissimilar Components

## Pence soils

Extent: 0 to 15 percent of the mapped areas

#### Wormet soils

Extent: 0 to 10 percent of the mapped areas

#### Sayner soils

Extent: 0 to 5 percent of the mapped areas

#### Worcester soils

Extent: 0 to 5 percent of the mapped areas

# 521A—Dody muck, 0 to 2 percent slopes

#### Component Description

#### Dody and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Drainageways and depressions on lake plains

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: At the surface (March, April, May, November, December)

Deepest depth to wet zone: 2.5 feet (August, September)

Months in which ponding does not occur: January, February, March, June, July,

August, September, December

Deepest ponding: 0.5 foot (April, May, October, November) Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 11.5 percent

Typical profile:

Oa—0 to 3 inches; muck Eg—3 to 9 inches; sand Bw—9 to 20 inches; fine sand Bg—20 to 23 inches; loamy sand 2Btg—23 to 47 inches; clay 3C1-47 to 58 inches; loamy sand 3C2-58 to 80 inches; sand

# Minor Dissimilar Components

#### Chelmo soils

Extent: 0 to 15 percent of the mapped areas

#### Meenon soils

Extent: 0 to 10 percent of the mapped areas

## Markey soils

Extent: 0 to 5 percent of the mapped areas

# 524E—Rock outcrop-Frogcreek-Metonga complex, 2 to 45 percent slopes, very stony

# **Component Description**

# **Rock outcrop**

Extent: 15 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Summits and shoulders

Slope range: 2 to 45 percent

Flooding: None Ponding: None

### Frogcreek and similar soils

Extent: 15 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes

Slope range: 2 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)

Ponding: None

Available water capacity to a depth of 60 inches: 7.4 inches Content of organic matter in the upper 10 inches: 2.1 percent

Typical profile:

A—0 to 4 inches; silt loam
E—4 to 13 inches; silt loam
2B/E—13 to 19 inches; loam
2Bt1—19 to 32 inches; sandy loam
2Bt2—32 to 46 inches; gravelly sandy loam

3Cd—46 to 80 inches; gravelly loamy sand

## Metonga and similar soils

Extent: 10 to 30 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 15 to 45 percent

Depth to restrictive layer(s): 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Parent material: Silty or loamy eolian mantle and in underlying loamy till underlain by

igneous or metamorphic bedrock

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.2 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A-0 to 3 inches; silt loam

E—3 to 4 inches; very fine sandy loam Bs—4 to 25 inches; very fine sandy loam 2Bw—25 to 28 inches; sandy loam

3R—28 to 80 inches; unweathered bedrock

# Minor Dissimilar Components

## Magroc soils

Extent: 0 to 15 percent of the mapped areas

# Stanberry soils

Extent: 0 to 15 percent of the mapped areas

#### Stinnett soils

Extent: 0 to 15 percent of the mapped areas

# 542B—Haugen, very stony-Haugen complex, 2 to 6 percent slopes

#### Component Description

#### Haugen, very stony, and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Footslopes and summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 4 inches; sandy loam Bw1—4 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam E/B—23 to 35 inches; gravelly sandy loam

B/E-35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam

Cd—79 to 80 inches; gravelly sandy loam

# Haugen and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Footslopes and summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches

Content of organic matter in the upper 10 inches: 1.6 percent

Typical profile:

Ap—0 to 7 inches; sandy loam Bw1—7 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam E/B—23 to 35 inches; gravelly sandy loam

B/E-35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam

Cd—79 to 80 inches; gravelly sandy loam

### Minor Dissimilar Components

#### Freeon, very stony, soils

Extent: 0 to 15 percent of the mapped areas

#### Freeon soils

Extent: 0 to 15 percent of the mapped areas

#### Glendenning, very stony, soils

Extent: 0 to 10 percent of the mapped areas

# Glendenning soils

Extent: 0 to 10 percent of the mapped areas

## Capitola soils

Extent: 0 to 10 percent of the mapped areas

#### **Scott Lake soils**

Extent: 0 to 5 percent of the mapped areas

# 542C—Haugen, very stony-Haugen complex, 6 to 12 percent slopes

# Component Description

# Haugen, very stony, and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 4 inches; sandy loam Bw1—4 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam

E/B—23 to 35 inches; gravelly sandy loam

B/E-35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam

Cd—79 to 80 inches; gravelly sandy loam

#### Haugen and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.6 percent

Typical profile:

Ap—0 to 7 inches; sandy loam Bw1—7 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam E/B—23 to 35 inches; gravelly sandy loam

B/E-35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam Cd—79 to 80 inches; gravelly sandy loam

# Minor Dissimilar Components

Amery, very stony, soils

Extent: 0 to 10 percent of the mapped areas

Amery soils

Extent: 0 to 10 percent of the mapped areas

Freeon, very stony, soils

Extent: 0 to 10 percent of the mapped areas

Freeon soils

Extent: 0 to 10 percent of the mapped areas

Crystal Lake soils

Extent: 0 to 5 percent of the mapped areas

Glendenning, very stony, soils

Extent: 0 to 5 percent of the mapped areas

Glendenning soils

Extent: 0 to 5 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

# 543B—Anigon silt loam, 2 to 6 percent slopes

# **Component Description**

# Anigon and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loess or silty alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.8 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; silt loam E—10 to 14 inches; silt loam B/E—14 to 20 inches; silt loam Bt1—20 to 30 inches; silt loam 2Bt2—30 to 34 inches; sandy loam

3C—34 to 60 inches; stratified sand to very gravelly coarse sand

# Minor Dissimilar Components

#### **Brill soils**

Extent: 0 to 15 percent of the mapped areas

#### Rosholt soils

Extent: 0 to 10 percent of the mapped areas

Poskin soils

Extent: 0 to 5 percent of the mapped areas

# 543C2—Anigon silt loam, 6 to 12 percent slopes, eroded

# **Component Description**

# Anigon and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loess or silty alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.8 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; silt loam E—10 to 14 inches; silt loam B/E—14 to 20 inches; silt loam Bt1—20 to 30 inches; silt loam 2Bt2—30 to 34 inches; sandy loam

3C-34 to 60 inches; stratified sand to very gravelly coarse sand

#### Minor Dissimilar Components

#### **Rosholt soils**

Extent: 0 to 15 percent of the mapped areas

# **Brill soils**

Extent: 0 to 10 percent of the mapped areas

# 544F—Menahga and Mahtomedi soils, 30 to 45 percent slopes

## Component Description

### Menahga and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 30 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 0.3 percent Typical profile:

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; sand Bw—2 to 25 inches; sand C—25 to 80 inches; sand

#### Mahtomedi and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 30 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A—0 to 5 inches; loamy sand

E—5 to 8 inches; sand

Bw1—8 to 15 inches; gravelly coarse sand Bw2—15 to 30 inches; gravelly sand

C—30 to 60 inches; gravelly sand

# Minor Dissimilar Components

#### Graycalm soils

Extent: 0 to 15 percent of the mapped areas

#### **Grettum soils**

Extent: 0 to 10 percent of the mapped areas

# 555A—Fordum silt loam, 0 to 2 percent slopes, frequently flooded

#### Component Description

#### Fordum and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Silty or loamy alluvium underlain by sandy and gravelly alluvium Lowest frequency of flooding (if it occurs): Rare (January, February, July, August,

December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 7.2 inches Content of organic matter in the upper 10 inches: 7.4 percent Typical profile:

A—0 to 6 inches; silt loam Cg1—6 to 18 inches; silt loam

Cg2—18 to 30 inches; fine sandy loam

2Cg-30 to 60 inches; sand

# Minor Dissimilar Components

# Somewhat poorly drained soils

Extent: 0 to 15 percent of the mapped areas

## **Bowstring soils**

Extent: 0 to 10 percent of the mapped areas

### Moppet soils

Extent: 0 to 5 percent of the mapped areas

# 574B—Sayner loamy sand, 0 to 6 percent slopes

# Component Description

#### Sayner and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains; eskers; outwash terraces

Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches
Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 7 inches; loamy sand Bs2—7 to 14 inches; sand

BC—14 to 22 inches; gravelly sand

C-22 to 60 inches; stratified sand to very gravelly coarse sand

# Minor Dissimilar Components

#### Pence soils

Extent: 0 to 10 percent of the mapped areas

#### Rubicon soils

Extent: 0 to 10 percent of the mapped areas

#### Moderately well drained soils

Extent: 0 to 10 percent of the mapped areas

# 574C—Sayner loamy sand, 6 to 15 percent slopes

# Component Description

### Sayner and similar soils

Extent: 85 to 100 percent of the mapped areas Geomorphic setting: Eskers; outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 7 inches; loamy sand Bs2—7 to 14 inches; sand

BC-14 to 22 inches; gravelly sand

C-22 to 60 inches; stratified sand to very gravelly coarse sand

# Minor Dissimilar Components

#### Pence soils

Extent: 0 to 10 percent of the mapped areas

#### Rubicon soils

Extent: 0 to 10 percent of the mapped areas

# 574E—Sayner loamy sand, 15 to 45 percent slopes

# Component Description

# Sayner and similar soils

Extent: 85 to 100 percent of the mapped areas Geomorphic setting: Eskers; outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 7 inches; loamy sand

Bs2-7 to 14 inches; sand

BC—14 to 22 inches; gravelly sand

C-22 to 60 inches; stratified sand to very gravelly coarse sand

### Minor Dissimilar Components

#### Pence soils

Extent: 0 to 10 percent of the mapped areas

Rubicon soils

Extent: 0 to 10 percent of the mapped areas

# 579B—Parkfalls sandy loam, 0 to 4 percent slopes, very stony

# Component Description

#### Parkfalls and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 30 to 50 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 4.9 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 5 inches; sandy loam E—5 to 8 inches; sandy loam Bs—8 to 17 inches; sandy loam E/B—17 to 30 inches; sandy loam Bt—30 to 33 inches; sandy loam BCd—33 to 48 inches; sandy loam 2Cd—48 to 80 inches; loamy sand

# Minor Dissimilar Components

#### Wozny soils

Extent: 0 to 10 percent of the mapped areas

#### Stanberry soils

Extent: 0 to 10 percent of the mapped areas

## Stinnett soils

Extent: 0 to 5 percent of the mapped areas

# 600A—Haplosaprists and Psammaquents, 0 to 2 percent slopes

# Component Description

# Haplosaprists and similar soils

Extent: 0 to 100 percent of the mapped areas

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Flooding: None

Wet zone: At the surface all year Ponding depth: 1.0 foot all year

General description: Haplosaprists are areas of very poorly drained organic soils that have been altered for use as cranberry beds. The alterations include excavating the organic material, filling with sand, and constructing ditches and dikes.

#### Psammaguents and similar soils

Extent: 0 to 100 percent of the mapped areas

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Flooding: None

Wet zone: At the surface all year Ponding depth: 1.0 foot all year

General description: Psammaquents are areas of poorly drained and very poorly drained sandy soils that have been altered for use as cranberry beds. The alterations include land leveling and constructing ditches and dikes.

# Minor Dissimilar Components

#### **Dikes**

Extent: 0 to 15 percent of the mapped areas

#### Poorly drained and very poorly drained loamy soils

Extent: 0 to 5 percent of the mapped areas

# 615B—Cress sandy loam, 0 to 6 percent slopes

## Component Description

# Cress and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits

Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

# Minor Dissimilar Components

Chetek soils

Extent: 0 to 15 percent of the mapped areas

Menahga soils

Extent: 0 to 10 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

Slimlake soils

Extent: 0 to 5 percent of the mapped areas

Rosholt soils

Extent: 0 to 5 percent of the mapped areas

# 615C—Cress sandy loam, 6 to 12 percent slopes

# **Component Description**

#### Cress and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

# Minor Dissimilar Components

## **Chetek soils**

Extent: 0 to 15 percent of the mapped areas

Menahga soils

Extent: 0 to 15 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

Rosholt soils

Extent: 0 to 5 percent of the mapped areas

# 615D—Cress sandy loam, 12 to 30 percent slopes

# Component Description

#### Cress and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Chetek soils

Extent: 0 to 15 percent of the mapped areas

## Menahga soils

Extent: 0 to 15 percent of the mapped areas

#### Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

# **Rosholt soils**

Extent: 0 to 5 percent of the mapped areas

# 623A—Capitola muck, 0 to 2 percent slopes, very stony

# Component Description

#### Capitola and similar soils

Extent: 65 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): 20 to 40 inches to dense material

Drainage class: Very poorly drained

Parent material: Silty or loamy alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 7.5 inches Content of organic matter in the upper 10 inches: 35.3 percent Typical profile:

Oa—0 to 5 inches; muck A—5 to 7 inches; silt loam Bg—7 to 22 inches; silt loam 2Btg—22 to 33 inches; sandy loam 2Cd—33 to 60 inches; sandy loam

# Minor Dissimilar Components

#### Cathro soils

Extent: 0 to 15 percent of the mapped areas

#### Pesabic soils

Extent: 0 to 10 percent of the mapped areas

#### Beseman soils

Extent: 0 to 5 percent of the mapped areas

#### Magnor soils

Extent: 0 to 5 percent of the mapped areas

### Capitola soils that are flooded for brief periods

Extent: 0 to 5 percent of the mapped areas

#### Cebana soils

Extent: 0 to 5 percent of the mapped areas

# 624A—Ossmer silt loam, 0 to 3 percent slopes

# **Component Description**

#### Ossmer and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Loess or silty alluvium underlain by sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 7.9 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 4 inches; silt loam
E—4 to 6 inches; silt loam
E/B—6 to 11 inches; silt loam
B/E—11 to 26 inches; silt loam
2Bt1—26 to 34 inches; loam
2Bt2—34 to 38 inches; sandy loam

3C-38 to 60 inches; stratified sand to very gravelly coarse sand

# Minor Dissimilar Components

# Billyboy soils

Extent: 0 to 10 percent of the mapped areas

#### Annriver soils

Extent: 0 to 10 percent of the mapped areas

#### Maincreek soils

Extent: 0 to 10 percent of the mapped areas

#### Sconsin soils

Extent: 0 to 5 percent of the mapped areas

# 632A—Aftad fine sandy loam, 0 to 2 percent slopes

# **Component Description**

#### Aftad and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces

Position on the landform: Summits

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mostly loamy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 9.3 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; fine sandy loam E/B—10 to 29 inches; fine sandy loam B/E—29 to 36 inches; fine sandy loam Bt—36 to 41 inches; fine sandy loam

C—41 to 60 inches; stratified fine sand to silt

#### Minor Dissimilar Components

### Plover soils

Extent: 0 to 15 percent of the mapped areas

#### Comstock soils

Extent: 0 to 10 percent of the mapped areas

# **Scott Lake soils**

Extent: 0 to 5 percent of the mapped areas

# 632B—Aftad fine sandy loam, 2 to 6 percent slopes

# Component Description

# Aftad and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Lake plains; stream terraces

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mostly loamy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 9.3 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; fine sandy loam E/B—10 to 29 inches; fine sandy loam B/E—29 to 36 inches; fine sandy loam Bt—36 to 41 inches; fine sandy loam C—41 to 60 inches; stratified fine sand to silt

# Minor Dissimilar Components

#### Plover soils

Extent: 0 to 15 percent of the mapped areas

#### Scott Lake soils

Extent: 0 to 5 percent of the mapped areas

#### Crystal Lake soils

Extent: 0 to 5 percent of the mapped areas

# 632C—Aftad fine sandy loam, 6 to 12 percent slopes

## Component Description

## Aftad and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mostly loamy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 9.3 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; fine sandy loam E/B—10 to 29 inches; fine sandy loam B/E—29 to 36 inches; fine sandy loam Bt—36 to 41 inches; fine sandy loam

C-41 to 60 inches; stratified fine sand to silt

## Minor Dissimilar Components

Crystal Lake soils

Extent: 0 to 15 percent of the mapped areas

Scott Lake soils

Extent: 0 to 5 percent of the mapped areas

Plover soils

Extent: 0 to 5 percent of the mapped areas

## 633F—Pence and Padus soils, 30 to 45 percent slopes

## Component Description

#### Pence and similar soils

Extent: 0 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 30 to 45 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A-0 to 3 inches; sandy loam E-3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

## Padus and similar soils

Extent: 0 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 30 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 6.0 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 26 inches; sandy loam B/E—26 to 38 inches; sandy loam

2C-38 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

## Sayner soils

Extent: 0 to 10 percent of the mapped areas

## 648B—Sconsin silt loam, 1 to 6 percent slopes

## Component Description

#### Sconsin and similar soils

Extent: 65 to 100 percent of the mapped areas

Geomorphic setting: Outwash terraces; stream terraces; outwash plains

Position on the landform: Summits

Slope range: 1 to 6 percent

Depth to restrictive layer(s): 20 to 38 inches to dense material

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 1.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, May, June,

July, August, September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 7.9 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 4 inches; silt loam E—4 to 5 inches; silt loam Bw—5 to 10 inches; silt loam

E'—10 to 18 inches; silt loam E/B—18 to 27 inches; silt loam

2B/E-27 to 34 inches; loam

2BCd—34 to 38 inches; sandy loam

3C-38 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

### Antigo soils

Extent: 0 to 15 percent of the mapped areas

#### Maincreek soils

Extent: 0 to 15 percent of the mapped areas

#### Billyboy soils

Extent: 0 to 5 percent of the mapped areas

#### Ossmer soils

Extent: 0 to 5 percent of the mapped areas

# 670C—Keweenaw-Pence complex, 6 to 15 percent slopes, stony

## **Component Description**

## Keweenaw and similar soils

Extent: 30 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 4 inches; sandy loam

Bs1,Bs2—4 to 16 inches; sandy loam Bs3—16 to 20 inches; loamy sand E´—20 to 27 inches; loamy sand E/B—27 to 43 inches; sand B/E—43 to 75 inches; loamy sand

C—75 to 80 inches; loamy sand

## Pence and similar soils

Extent: 25 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Padus soils

Extent: 0 to 15 percent of the mapped areas

## Sayner soils

Extent: 0 to 15 percent of the mapped areas

# 670E—Keweenaw-Pence complex, 15 to 45 percent slopes, stony

## Component Description

## Keweenaw and similar soils

Extent: 35 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 4 inches; sandy loam

Bs1,Bs2—4 to 16 inches; sandy loam
Bs3—16 to 20 inches; loamy sand
E´—20 to 27 inches; loamy sand
E/B—27 to 43 inches; sand
B/E—43 to 75 inches; loamy sand
C—75 to 80 inches; loamy sand

#### Pence and similar soils

Extent: 25 to 35 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Padus soils

Extent: 0 to 15 percent of the mapped areas

Sayner soils

Extent: 0 to 15 percent of the mapped areas

# 671B—Spoonerhill, stony-Spoonerhill complex, 2 to 6 percent slopes

## Component Description

## Spoonerhill, stony, and similar soils

Extent: 5 to 95 percent of the mapped areas

Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Thin mantle of loamy alluvium and sandy alluvium underlain by sandy

till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.0 percent

Typical profile:

A—0 to 3 inches; sandy loam

Bw1—3 to 12 inches; gravelly sandy loam 2Bw2—12 to 16 inches; gravelly loamy sand

2E/B—16 to 34 inches; loamy sand

2C1-34 to 46 inches; sand

2C2-46 to 80 inches; gravelly loamy sand

## Spoonerhill and similar soils

Extent: 5 to 95 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Thin mantle of loamy alluvium and sandy alluvium underlain by sandy

till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.0 percent

Typical profile:

A-0 to 3 inches; sandy loam

Bw1—3 to 12 inches; gravelly sandy loam

2Bw2—12 to 16 inches; gravelly loamy sand

2E/B—16 to 34 inches; loamy sand

2C1—34 to 46 inches; sand

2C2—46 to 80 inches; gravelly loamy sand

## Minor Dissimilar Components

#### Fremstadt soils

Extent: 0 to 10 percent of the mapped areas

#### Slimlake soils

Extent: 0 to 10 percent of the mapped areas

## **Grettum soils**

Extent: 0 to 5 percent of the mapped areas

## Haugen soils

Extent: 0 to 5 percent of the mapped areas

**Cress soils** 

Extent: 0 to 5 percent of the mapped areas

Glendenning soils

Extent: 0 to 5 percent of the mapped areas

# 680B—Stanberry-Pence complex, 2 to 6 percent slopes, stony

## Component Description

## Stanberry, stony, and similar soils

Extent: 50 to 70 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 6.1 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 24 inches; sandy loam B/E—24 to 32 inches; sandy loam 2BC—32 to 42 inches; loamy sand 2Cd—42 to 80 inches; loamy sand

## Pence, stony, and similar soils

Extent: 20 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam

2BC-15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

## Parkfalls soils that are stony

Extent: 0 to 10 percent of the mapped areas

## Keweenaw soils that are stony

Extent: 0 to 5 percent of the mapped areas

## 683A—Tipler sandy loam, 0 to 3 percent slopes

## Component Description

## Tipler and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: 5.5 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 5.5 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

A—0 to 3 inches; sandy loam
E—3 to 5 inches; sandy loam
Bs—5 to 19 inches; sandy loam
B/E—19 to 26 inches; sandy loam
Bt—26 to 33 inches; sandy loam

2C-33 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Padus soils

Extent: 0 to 10 percent of the mapped areas

#### Worcester soils

Extent: 0 to 10 percent of the mapped areas

# 706A—Winterfield-Totagatic complex, 0 to 2 percent slopes, frequently flooded

#### Component Description

#### Winterfield and similar soils

Extent: 50 to 80 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 1 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Somewhat poorly drained

Parent material: Sandy alluvium

Lowest frequency of flooding (if it occurs): Rare (January, February, December)

Highest frequency of flooding: Frequent (April) Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 3.0 feet (September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 5.0 inches Content of organic matter in the upper 10 inches: 2.2 percent

Typical profile:

A-0 to 7 inches; very fine sandy loam

C-7 to 60 inches; sand

## Totagatic and similar soils

Extent: 15 to 40 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Mostly sandy alluvium

Lowest frequency of flooding (if it occurs): Rare (January, February, July, August,

December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (May, November, December)

Deepest depth to wet zone: More than 6.7 feet (April)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 4.4 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 4 inches; fine sandy loam Bw1—4 to 8 inches; loamy fine sand Bw2—8 to 17 inches; fine sand Cg1—17 to 28 inches; fine sand Cg2—28 to 46 inches; sand C—46 to 70 inches; sand C´g—70 to 80 inches; sand

## Minor Dissimilar Components

#### **Bowstring soils**

Extent: 0 to 10 percent of the mapped areas

#### Moquah soils

Extent: 0 to 10 percent of the mapped areas

#### Pelkie soils

Extent: 0 to 5 percent of the mapped areas

## 724A—Rib-Rock outcrop complex, 0 to 2 percent slopes

### Component Description

## Rib and similar soils

Extent: 40 to 90 percent of the mapped areas

Geomorphic setting: Drainageways on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Silty alluvium over loamy alluvium underlain by stratified sandy and

gravelly outwash Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 8.3 inches Content of organic matter in the upper 10 inches: 4.8 percent

Typical profile:

A—0 to 7 inches; silt loam Eg—7 to 10 inches; silt loam Btg—10 to 32 inches; silt loam 2Btg—32 to 35 inches; loam

3BC—35 to 37 inches; gravelly loamy sand

3C-37 to 60 inches; stratified sand to very gravelly coarse sand

## **Rock outcrop**

Extent: 3 to 15 percent of the mapped areas

Geomorphic setting: Drainageways on disintegration moraines

## Minor Dissimilar Components

#### **Barronett soils**

Extent: 0 to 15 percent of the mapped areas

#### Poskin soils

Extent: 0 to 15 percent of the mapped areas

### Cathro soils

Extent: 0 to 10 percent of the mapped areas

#### Magroc soils

Extent: 0 to 10 percent of the mapped areas

## 726B—Sissabagama loamy sand, 0 to 6 percent slopes

## Component Description

#### Sissabagama and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Lake plains Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy deposits underlain by stratified sandy and loamy lacustrine

deposits Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 5.7 inches Content of organic matter in the upper 10 inches: 2.0 percent

## Typical profile:

Ap—0 to 10 inches; loamy sand Bw—10 to 31 inches; sand E&Bt—31 to 45 inches; sand

2C—45 to 80 inches; stratified very fine sand to silt

## Minor Dissimilar Components

#### **Grettum soils**

Extent: 0 to 15 percent of the mapped areas

#### **Wurtsmith soils**

Extent: 0 to 5 percent of the mapped areas

#### Perida soils

Extent: 0 to 5 percent of the mapped areas

## 733A—Wozny muck, 0 to 2 percent slopes, very stony

## **Component Description**

## Wozny and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Drainageways and depressions on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Very poorly drained

Parent material: Loess or silty alluvium and loamy alluvium underlain by dense sandy

till

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: More than 6.7 feet (August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, December

Deepest ponding: 0.5 foot (April, May, November)

Available water capacity to a depth of 60 inches: 10.6 inches Content of organic matter in the upper 10 inches: 21.3 percent

Typical profile:

Oa—0 to 3 inches; muck Eg—3 to 17 inches; silt loam Btg—17 to 37 inches; silt loam

2C-37 to 56 inches; stratified sandy loam to gravelly loam

3Cd—56 to 80 inches; loamy sand

## Minor Dissimilar Components

## Cathro soils

Extent: 0 to 15 percent of the mapped areas

#### Parkfalls soils

Extent: 0 to 10 percent of the mapped areas

#### Stinnett soils

Extent: 0 to 10 percent of the mapped areas

## 771A—Lenroot loamy sand, 0 to 3 percent slopes

## Component Description

#### Lenroot and similar soils

Extent: 75 to 95 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained Parent material: Sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: 5.0 feet (February, August)

Pondina: None

Available water capacity to a depth of 60 inches: 2.8 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A—0 to 4 inches; loamy sand Bw1—4 to 8 inches; loamy sand

Bw2—8 to 14 inches; loamy coarse sand BC—14 to 21 inches; gravelly coarse sand

C-21 to 80 inches; stratified coarse sand to gravelly coarse sand

## Minor Dissimilar Components

#### Mahtomedi soils

Extent: 5 to 15 percent of the mapped areas

#### Meehan soils

Extent: 0 to 10 percent of the mapped areas

## 827A—Scoba sandy loam, 0 to 3 percent slopes

## **Component Description**

## Scoba and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces; lake plains

Position on the landform: Summits Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.8 inches Content of organic matter in the upper 10 inches: 2.3 percent

Typical profile:

Ap—0 to 9 inches; sandy loam

E/B—9 to 16 inches; sandy loam B/E—16 to 20 inches; sandy loam Bt—20 to 26 inches; sandy loam 2Bt—26 to 31 inches; loamy sand

2C-31 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Rosholt soils

Extent: 0 to 15 percent of the mapped areas

#### Aftad soils

Extent: 0 to 10 percent of the mapped areas

#### **Plover soils**

Extent: 0 to 5 percent of the mapped areas

#### Oesterle soils

Extent: 0 to 5 percent of the mapped areas

# 853C—Frogcreek-Stinnett-Wozny complex, 0 to 15 percent slopes, very stony

## **Component Description**

## Frogcreek and similar soils

Extent: 35 to 70 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 2 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September)
Ponding: None

Available water capacity to a depth of 60 inches: 7.4 inches Content of organic matter in the upper 10 inches: 2.1 percent

Typical profile:

A—0 to 4 inches; silt loam
E—4 to 13 inches; silt loam
2B/E—13 to 19 inches; loam
2Bt1—19 to 32 inches; sandy loam
2Bt2—32 to 46 inches; gravelly sandy loam
3Cd—46 to 80 inches; gravelly loamy sand

#### Stinnett and similar soils

Extent: 15 to 50 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 9.6 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 4 inches; silt loam

E—4 to 7 inches; silt

E/B—7 to 18 inches; silt

B/E—18 to 29 inches; silt loam

2Bt1-29 to 34 inches; loam

2Bt2—34 to 41 inches; sandy loam

3C-41 to 55 inches; loamy sand

3Cd—55 to 80 inches; loamy sand

## Wozny soils

Extent: 15 to 30 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Very poorly drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: More than 6.7 feet (August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, December

Deepest ponding: 0.5 foot (April, May, November)

Available water capacity to a depth of 60 inches: 10.6 inches Content of organic matter in the upper 10 inches: 21.3 percent

Typical profile:

Oa—0 to 3 inches; muck Eg—3 to 17 inches; silt loam Btg—17 to 37 inches; silt loam

2C—37 to 56 inches; stratified sandy loam to gravelly loam

3Cd-56 to 80 inches; loamy sand

#### Minor Dissimilar Components

#### Stanberry soils

Extent: 0 to 10 percent of the mapped areas

#### Cathro soils

Extent: 0 to 5 percent of the mapped areas

## 856B—Stinnett silt loam, 0 to 4 percent slopes, very stony

## Component Description

## Stinnett and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 9.6 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 4 inches; silt loam E—4 to 7 inches; silt E/B—7 to 18 inches; silt B/E—18 to 29 inches; silt loam 2Bt1—29 to 34 inches; loam 2Bt2—34 to 41 inches; sandy loam 3C—41 to 55 inches; loamy sand 3Cd—55 to 80 inches; loamy sand

## Minor Dissimilar Components

## Frogcreek soils

Extent: 0 to 15 percent of the mapped areas

Wozny soils

Extent: 0 to 15 percent of the mapped areas

# 857B—Frogcreek silt loam, 2 to 6 percent slopes, very stony

#### Component Description

## Frogcreek and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Footslopes and summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September)
Ponding: None

Available water capacity to a depth of 60 inches: 7.4 inches Content of organic matter in the upper 10 inches: 2.1 percent

Typical profile:

A—0 to 4 inches; silt loam E—4 to 13 inches; silt loam

2B/E-13 to 19 inches; loam

2Bt1—19 to 32 inches; sandy loam

2Bt2—32 to 46 inches; gravelly sandy loam 3Cd—46 to 80 inches; gravelly loamy sand

## Minor Dissimilar Components

#### Stinnett soils

Extent: 0 to 15 percent of the mapped areas

#### Stanberry soils

Extent: 0 to 5 percent of the mapped areas

## Wozny soils

Extent: 0 to 5 percent of the mapped areas

# 857C—Frogcreek silt loam, 6 to 15 percent slopes, very stony

## Component Description

## Frogcreek and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

Minor Dissimilar Components

September)
Ponding: None

Available water capacity to a depth of 60 inches: 7.4 inches Content of organic matter in the upper 10 inches: 2.1 percent

Typical profile:

A—0 to 4 inches; silt loam E—4 to 13 inches; silt loam 2B/E—13 to 19 inches; loam 2Bt1—19 to 32 inches; sandy loam

2Bt2—32 to 46 inches; gravelly sandy loam 3Cd—46 to 80 inches; gravelly loamy sand

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#### Stinnett soils

Extent: 0 to 10 percent of the mapped areas

#### Stanberry soils

Extent: 0 to 7 percent of the mapped areas

#### Wozny soils

Extent: 0 to 3 percent of the mapped areas

# 873B—Stanberry sandy loam, 1 to 6 percent slopes, very stony

## Component Description

## Stanberry and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 1 to 6 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 6.1 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 24 inches; sandy loam B/E—24 to 32 inches; sandy loam

2BC-32 to 42 inches; loamy sand

2Cd—42 to 80 inches; loamy sand

## Minor Dissimilar Components

#### Springstead soils

Extent: 0 to 15 percent of the mapped areas

#### Frogcreek soils

Extent: 0 to 5 percent of the mapped areas

### Parkfalls soils

Extent: 0 to 5 percent of the mapped areas

#### Stinnett soils

Extent: 0 to 5 percent of the mapped areas

#### Wozny soils

Extent: 0 to 5 percent of the mapped areas

# 873C—Stanberry sandy loam, 6 to 15 percent slopes, very stony

#### Component Description

#### Stanberry and similar soils

Extent: 65 to 95 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 6.1 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 24 inches; sandy loam B/E—24 to 32 inches; sandy loam 2BC—32 to 42 inches; loamy sand

2Cd-42 to 80 inches; loamy sand

## Minor Dissimilar Components

#### Keweenaw soils

Extent: 0 to 15 percent of the mapped areas

## Springstead soils

Extent: 0 to 10 percent of the mapped areas

## Beaverbay soils

Extent: 0 to 5 percent of the mapped areas

#### Frogcreek soils

Extent: 0 to 5 percent of the mapped areas

#### Parkfalls soils

Extent: 0 to 5 percent of the mapped areas

#### Stinnett soils

Extent: 0 to 5 percent of the mapped areas

#### Wozny soils

Extent: 0 to 5 percent of the mapped areas

# 873D—Stanberry sandy loam, 15 to 30 percent slopes, very stony

## Component Description

#### Stanberry and similar soils

Extent: 65 to 95 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 15 to 30 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 6.1 inches Content of organic matter in the upper 10 inches: 1.2 percent Typical profile:

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 24 inches; sandy loam

B/E—24 to 32 inches; sandy loam

2BC—32 to 42 inches; loamy sand

2Cd—42 to 80 inches; loamy sand

## Minor Dissimilar Components

#### Keweenaw soils

Extent: 0 to 15 percent of the mapped areas

Padus soils

Extent: 0 to 15 percent of the mapped areas

Beaverbay soils

Extent: 0 to 10 percent of the mapped areas

Frogcreek soils

Extent: 0 to 10 percent of the mapped areas

## 905A—Cublake loamy sand, 0 to 3 percent slopes

## **Component Description**

## **Cublake and similar soils**

Extent: 65 to 100 percent of the mapped areas

Geomorphic setting: Lake plains Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash underlain by stratified silty, loamy, and sandy

lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 5.7 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 3 inches; loamy sand E—3 to 4 inches; loamy sand Bs—4 to 23 inches; loamy sand BC—23 to 32 inches; sand C1—32 to 40 inches; sand

C2—40 to 48 inches; fine sand

2C3—48 to 60 inches; stratified very fine sandy loam to silt loam

## Minor Dissimilar Components

#### Flink soils

Extent: 0 to 10 percent of the mapped areas

#### Annalake soils

Extent: 0 to 10 percent of the mapped areas

#### Croswell soils

Extent: 0 to 10 percent of the mapped areas

#### Chinwhisker soils

Extent: 0 to 5 percent of the mapped areas

## 926A—Flink loamy sand, 0 to 3 percent slopes

## **Component Description**

## Flink and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Lake plains Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Sandy outwash deposits underlain by stratified silty, loamy, and sandy

lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 1.0 foot (April) Deepest depth to wet zone: 4.0 feet (August)

Ponding: None

Available water capacity to a depth of 60 inches: 5.5 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A-0 to 3 inches; loamy sand

E—3 to 6 inches; sand Bhs—6 to 9 inches; sand Bs—9 to 26 inches; sand

BC—26 to 35 inches; sand C—35 to 46 inches; sand

2Cg-46 to 52 inches; stratified silt to silty clay loam

2C-52 to 80 inches; stratified silt to silty clay loam to loamy very fine sand

## Minor Dissimilar Components

#### Cublake soils

Extent: 0 to 15 percent of the mapped areas

#### Au Gres soils

Extent: 0 to 10 percent of the mapped areas

## Kinross soils

Extent: 0 to 10 percent of the mapped areas

# 943D—Stanberry, very stony-Greenwood complex, 0 to 35 percent slopes

## Component Description

## Stanberry and similar soils

Extent: 30 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 30 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Pondina: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 24 inches; sandy loam B/E—24 to 32 inches; sandy loam 2BC—32 to 42 inches; loamy sand 2Cd—42 to 80 inches; loamy sand

#### Greenwood and similar soils

Extent: 15 to 30 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 30.5 inches Content of organic matter in the upper 10 inches: 65.0 percent

Typical profile:

Oi-0 to 6 inches; peat

Oe-6 to 60 inches; mucky peat

## Minor Dissimilar Components

#### Frogcreek soils

Extent: 0 to 10 percent of the mapped areas

## Sarona soils

Extent: 0 to 10 percent of the mapped areas

## Wozny soils

Extent: 0 to 10 percent of the mapped areas

## 948A—Billyboy silt loam, 0 to 3 percent slopes

## Component Description

## Billyboy and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 1.5 feet (April)

Deepest depth to wet zone: 5.5 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 7.1 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 4 inches; silt loam
E—4 to 11 inches; silt loam
E/B—11 to 20 inches; silt loam
2B/E—20 to 26 inches; loam
2Bt—26 to 30 inches; sandy loam
3Bt—30 to 35 inches; loamy sand

3C-35 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Ossmer soils

Extent: 0 to 10 percent of the mapped areas

#### Antigo soils

Extent: 0 to 5 percent of the mapped areas

#### Sconsin soils

Extent: 0 to 5 percent of the mapped areas

# 970C—Keweenaw, stony-Pence, stony-Greenwood complex, 0 to 15 percent slopes

## Component Description

#### Keweenaw and similar soils

Extent: 30 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 4 inches; sandy loam

Bs1,Bs2—4 to 16 inches; sandy loam Bs3—16 to 20 inches; loamy sand E´—20 to 27 inches; loamy sand

E/B—27 to 43 inches; sand B/E—43 to 75 inches; loamy sand C—75 to 80 inches; loamy sand

#### Pence and similar soils

Extent: 15 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

#### Greenwood and similar soils

Extent: 10 to 20 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 30.5 inches Content of organic matter in the upper 10 inches: 65.0 percent

Typical profile:

Oi—0 to 6 inches; peat

Oe—6 to 60 inches; mucky peat

## Minor Dissimilar Components

## Haugen soils

Extent: 0 to 15 percent of the mapped areas

#### Aftad soils

Extent: 0 to 10 percent of the mapped areas

#### Rosholt soils

Extent: 0 to 15 percent of the mapped areas

# 970E—Keweenaw, stony-Pence, stony-Greenwood complex, 0 to 45 percent slopes

## Component Description

#### Keweenaw and similar soils

Extent: 30 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 4 inches; sandy loam

Bs1,Bs2—4 to 16 inches; sandy loam Bs3—16 to 20 inches; loamy sand E´—20 to 27 inches; loamy sand

E/B—27 to 43 inches; sand

B/E—43 to 75 inches; loamy sand C—75 to 80 inches; loamy sand

#### Pence and similar soils

Extent: 15 to 50 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

#### Greenwood and similar soils

Extent: 10 to 20 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 30.5 inches Content of organic matter in the upper 10 inches: 65.0 percent

Typical profile:

Oi-0 to 6 inches; peat

Oe—6 to 60 inches; mucky peat

## Minor Dissimilar Components

#### Amery soils

Extent: 0 to 20 percent of the mapped areas

#### Aftad soils

Extent: 0 to 10 percent of the mapped areas

# 1070C—Fremstadt, stony-Cress complex, 6 to 15 percent slopes

## **Component Description**

### Fremstadt and similar soils

Extent: 30 to 70 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Sandy till or sandy mudflow sediments

Flooding: None

Depth to wet zone: More than 6.0 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 5 inches; sandy loam Bw—5 to 33 inches; loamy sand B/E1—33 to 37 inches; sandy loam B/E2—37 to 45 inches; loamy sand BC—45 to 70 inches; loamy sand C—70 to 80 inches; loamy sand

#### Cress and similar soils

Extent: 15 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam
Bw1—3 to 15 inches; sandy loam
2Bw2—15 to 31 inches; loamy sand
2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

## Fremstadt soils that are not stony

Extent: 0 to 30 percent of the mapped areas

## Haugen soils

Extent: 0 to 15 percent of the mapped areas

## Spoonerhill soils that are stony

Extent: 0 to 15 percent of the mapped areas

#### Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

#### Spoonerhill soils

Extent: 0 to 10 percent of the mapped areas

# 1070D—Fremstadt, stony-Cress complex, 15 to 30 percent slopes

### Component Description

## Fremstadt and similar soils

Extent: 40 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 15 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Sandy till or sandy mudflow sediments

Flooding: None

Depth to wet zone: More than 6.0 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 5 inches; sandy loam Bw—5 to 33 inches; loamy sand B/E1—33 to 37 inches; sandy loam B/E2—37 to 45 inches; loamy sand BC—45 to 70 inches; loamy sand C—70 to 80 inches; loamy sand

#### Cress and similar soils

Extent: 20 to 50 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

#### Mahtomedi soils

Extent: 0 to 15 percent of the mapped areas

**Amery soils** 

Extent: 0 to 10 percent of the mapped areas

**Rosholt soils** 

Extent: 0 to 10 percent of the mapped areas

# 1080B—Spoonerhill-Spoonerhill, stony-Cress complex, 1 to 6 percent slopes

## **Component Description**

## Spoonerhill and similar soils

Extent: 5 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Thin mantle of loamy alluvium and sandy alluvium underlain by sandy

till or sandy mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.0 percent

Typical profile:

A—0 to 3 inches; sandy loam

Bw1—3 to 12 inches; gravelly sandy loam

2Bw2-12 to 16 inches; gravelly loamy sand

2E/B-16 to 34 inches; loamy sand

2C1—34 to 46 inches; sand

2C2—46 to 80 inches; gravelly loamy sand

## Spoonerhill, stony, and similar soils

Extent: 5 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Thin mantle of loamy alluvium and sandy alluvium underlain by sandy

till or sandy mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.0 percent

Typical profile:

A—0 to 3 inches; sandy loam

Bw1—3 to 12 inches; gravelly sandy loam 2Bw2—12 to 16 inches; gravelly loamy sand

2E/B-16 to 34 inches; loamy sand

2C1—34 to 46 inches; sand

2C2-46 to 80 inches; gravelly loamy sand

#### Cress and similar soils

Extent: 15 to 35 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

## Minor Dissimilar Components

## Fremstadt soils

Extent: 0 to 15 percent of the mapped areas

## **Grettum soils**

Extent: 0 to 10 percent of the mapped areas

# 1653C—Stanberry-Parkfalls-Wozny complex, 0 to 15 percent slopes, very stony

## Component Description

## Stanberry and similar soils

Extent: 30 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 2 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 6.1 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 24 inches; sandy loam B/E—24 to 32 inches; sandy loam 2BC—32 to 42 inches; loamy sand

2Cd-42 to 80 inches; loamy sand

### Parkfalls and similar soils

Extent: 15 to 45 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 30 to 50 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 5.5 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 5 inches; sandy loam E—5 to 8 inches; sandy loam Bs—8 to 17 inches; sandy loam E/B—17 to 30 inches; sandy loam Bt—30 to 33 inches; sandy loam BCd—33 to 48 inches; sandy loam 2Cd—48 to 80 inches; loamy sand

### Wozny and similar soils

Extent: 10 to 20 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Very poorly drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: More than 6.7 feet (August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, December Deepest ponding: 0.5 foot (April, May, November)

Available water capacity to a depth of 60 inches: 10.6 inches Content of organic matter in the upper 10 inches: 21.3 percent

Typical profile:

Oa—0 to 3 inches; muck Eg—3 to 17 inches; silt loam Btg—17 to 37 inches; silt loam

2C-37 to 56 inches; stratified sandy loam to gravelly loam

3Cd-56 to 80 inches; loamy sand

## Minor Dissimilar Components

## Frogcreek soils

Extent: 0 to 15 percent of the mapped areas

#### Cathro soils

Extent: 0 to 10 percent of the mapped areas

#### Keweenaw soils

Extent: 0 to 10 percent of the mapped areas

## 2015—Pits

#### Component Description

#### **Pits**

Extent: 100 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains; moraines; eskers

Flooding: None Ponding: None

This map unit consists of open excavations from which sand, gravel, or loamy material has been removed. Most pits are in areas of outwash, but some are in areas of till. Some pits are still in use. Others are no longer used and have been reclaimed or are covered by brush and weeds. Some pits contain water. Because of the variability of this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

## 2050—Landfill

#### Component Description

#### Landfill

Extent: 100 percent of the mapped areas

This map unit consists of areas of accumulated waste products of human habitation. The areas can be above or below natural ground level. Because of the

variability of this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

## 3011A—Barronett silt loam, 0 to 2 percent slopes

## Component Description

#### **Barronett and similar soils**

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Depressions on lake plains; drainageways on stream terraces

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Mostly silty lacustrine deposits

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 5.5 feet (February)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 11.5 inches Content of organic matter in the upper 10 inches: 6.1 percent

Typical profile:

Ap—0 to 9 inches; silt loam Eg—9 to 16 inches; silt loam Btg—16 to 34 inches; silt loam

Cg—34 to 60 inches; stratified silt loam to very fine sand

## Minor Dissimilar Components

#### Cathro soils

Extent: 0 to 15 percent of the mapped areas

#### **Comstock soils**

Extent: 0 to 10 percent of the mapped areas

## 3125A—Meehan loamy sand, 0 to 2 percent slopes

## Component Description

#### Meehan and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Footslopes

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parant material: Sandy outwook

Parent material: Sandy outwash

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 3.5 inches Content of organic matter in the upper 10 inches: 1.0 percent

Typical profile:

A-0 to 5 inches; loamy sand

E—5 to 8 inches; sand Bw—8 to 28 inches; sand C—28 to 60 inches; sand

## Minor Dissimilar Components

#### **Newson soils**

Extent: 0 to 15 percent of the mapped areas

**Wurtsmith soils** 

Extent: 0 to 15 percent of the mapped areas

## 3126A—Wurtsmith loamy sand, 0 to 3 percent slopes

## Component Description

#### Wurtsmith and similar soils

Extent: 65 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: 5.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 3.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw—9 to 37 inches; coarse sand

C-37 to 60 inches; sand

## Minor Dissimilar Components

### Friendship soils

Extent: 0 to 15 percent of the mapped areas

#### Menahga soils

Extent: 0 to 10 percent of the mapped areas

#### Slimlake soils

Extent: 0 to 5 percent of the mapped areas

#### Meehan soils

Extent: 0 to 5 percent of the mapped areas

## 3276A—Au Gres loamy sand, 0 to 3 percent slopes

#### Component Description

### Au Gres and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Somewhat poorly drained

Parent material: Sandy outwash

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 4.8 inches Content of organic matter in the upper 10 inches: 0.8 percent Typical profile:

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 5 inches; loamy sand Bhs—5 to 8 inches; loamy sand Bs—8 to 16 inches; loamy sand BC—16 to 28 inches; sand C—28 to 60 inches; sand

## Minor Dissimilar Components

#### Croswell soils

Extent: 0 to 10 percent of the mapped areas

#### Kinross soils

Extent: 0 to 10 percent of the mapped areas

#### Flink soils

Extent: 0 to 5 percent of the mapped areas

#### Chinwhisker soils

Extent: 0 to 5 percent of the mapped areas

# 3312B—Glendenning, very stony-Glendenning complex, 0 to 4 percent slopes

### Component Description

## Glendenning, very stony, and similar soils

Extent: 20 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 7.8 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 5 inches; sandy loam E—5 to 15 inches; sandy loam E/B—15 to 20 inches; sandy loam B/E—20 to 26 inches; sandy loam Bt1—26 to 40 inches; sandy loam Bt2—40 to 65 inches; sandy loam Cd—65 to 80 inches; sandy loam

#### Glendenning and similar soils

Extent: 15 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 7.8 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

Ap—0 to 7 inches; sandy loam E—7 to 15 inches; sandy loam E/B—15 to 20 inches; sandy loam B/E—20 to 26 inches; sandy loam Bt1—26 to 40 inches; sandy loam Bt2—40 to 65 inches; sandy loam Cd—65 to 80 inches; sandy loam

## Minor Dissimilar Components

## Capitola soils

Extent: 0 to 15 percent of the mapped areas

## Haugen soils

Extent: 0 to 10 percent of the mapped areas

#### Oesterle soils

Extent: 0 to 5 percent of the mapped areas

#### Plover soils

Extent: 0 to 5 percent of the mapped areas

## 3336A—Fenander fine sandy loam, 0 to 2 percent slopes

## Component Description

## Fenander and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Depressions on lake plains; drainageways on stream terraces

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Stratified loamy and sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: At the surface (March, April, May, June, October, November)

Deepest depth to wet zone: 5.5 feet (February)

Months in which ponding does not occur: January, February, March, June, July, August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 8.4 inches Content of organic matter in the upper 10 inches: 2.4 percent

Typical profile:

Ap—0 to 9 inches; fine sandy loam Eg—9 to 15 inches; fine sandy loam

Btg-15 to 27 inches; loam

BC-27 to 33 inches; fine sandy loam

C-33 to 80 inches; stratified loamy fine sand to fine sandy loam

## Minor Dissimilar Components

#### Plover soils

Extent: 0 to 10 percent of the mapped areas

Cathro soils

Extent: 0 to 5 percent of the mapped areas

# 3403A—Loxley, Beseman, and Dawson soils, 0 to 1 percent slopes

## **Component Description**

## Loxley and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 26.5 inches Content of organic matter in the upper 10 inches: 80.0 percent

Typical profile:

Oe—0 to 13 inches; mucky peat Oa—13 to 60 inches; muck

#### Beseman and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick over loamy till

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 18.2 inches

Content of organic matter in the upper 10 inches: 50.0 percent

Typical profile:

Oa—0 to 36 inches; muck Cg—36 to 60 inches; loam

#### Dawson and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Sphagnum moss and herbaceous organic material 16 to 51 inches thick over sandy or sandy and gravelly deposits

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November) Deepest depth to wet zone: 0.5 foot (January, February, March, July, August,

September, December)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 18.2 inches Content of organic matter in the upper 10 inches: 75.0 percent

Typical profile:

Oi—0 to 8 inches; peat Oa—8 to 38 inches; muck A—38 to 40 inches; silt loam 2C—40 to 60 inches; sand

## Minor Dissimilar Components

#### Uskabwanka soils

Extent: 0 to 5 percent of the mapped areas

# 3424C—Frogcreek-Magroc-Stinnett complex, 0 to 15 percent slopes, very stony, rocky

## Component Description

## Frogcreek and similar soils

Extent: 15 to 70 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 2 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September)
Ponding: None

Available water capacity to a depth of 60 inches: 7.4 inches Content of organic matter in the upper 10 inches: 2.1 percent

## Typical profile:

A—0 to 4 inches; silt loam
E—4 to 13 inches; silt loam
2B/E—13 to 19 inches; loam
2Bt1—19 to 32 inches; sandy loam
2Bt2—32 to 46 inches; gravelly sandy loam
3Cd—46 to 80 inches; gravelly loamy sand

#### Magroc and similar soils

Extent: 15 to 35 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 40 to 60 inches to lithic bedrock

Drainage class: Somewhat poorly drained

Parent material: Loess underlain by loamy glacial till

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 7.3 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; silt loam
E—2 to 11 inches; silt loam
E/B—11 to 22 inches; silt loam
2Bt—22 to 30 inches; sandy loam
3C1—30 to 45 inches; gravelly loamy sand
3C2—45 to 50 inches; gravelly loamy sand
4R—50 to 80 inches; unweathered bedrock

#### Stinnett and similar soils

Extent: 15 to 30 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 9.6 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 4 inches; silt loam E—4 to 7 inches; silt E/B—7 to 18 inches; silt B/E—18 to 29 inches; silt loam 2Bt1—29 to 34 inches; loam 2Bt2—34 to 41 inches; sandy loam 3C—41 to 55 inches; loamy sand 3Cd—55 to 80 inches; loamy sand

#### Rock outcrop

Extent: 1 to 10 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Summits and shoulders

Slope range: 0 to 10 percent

# Minor Dissimilar Components

### Stanberry soils

Extent: 0 to 5 percent of the mapped areas

#### Wozny soils

Extent: 0 to 5 percent of the mapped areas

# 3446A—Newson muck, 0 to 2 percent slopes

# **Component Description**

#### Newson and similar soils

Extent: 65 to 100 percent of the mapped areas

Geomorphic setting: Drainageways and depressions on outwash plains and lake

plains

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 5.6 inches Content of organic matter in the upper 10 inches: 25.0 percent

Typical profile:

Oa—0 to 3 inches; muck A—3 to 8 inches; loamy sand Bg—8 to 16 inches; sand BCg—16 to 22 inches; sand C—22 to 60 inches; sand

### Minor Dissimilar Components

#### Meehan soils

Extent: 0 to 15 percent of the mapped areas

#### Markey soils

Extent: 0 to 10 percent of the mapped areas

#### Minocqua soils

Extent: 0 to 5 percent of the mapped areas

# 3448B—Grettum loamy sand, 0 to 6 percent slopes

## Component Description

#### Grettum and similar soils

Extent: 60 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains

Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash or sandy lacustrine deposits with lamellae

Flooding: None

Shallowest depth to wet zone: 4.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 32 inches; sand E&Bt—32 to 75 inches; sand C—75 to 80 inches; sand

# Minor Dissimilar Components

#### Graycalm soils

Extent: 0 to 15 percent of the mapped areas

# Menahga soils

Extent: 0 to 10 percent of the mapped areas

#### **Cress soils**

Extent: 0 to 7 percent of the mapped areas

#### Aftad soils

Extent: 0 to 5 percent of the mapped areas

### Karlsborg soils

Extent: 0 to 3 percent of the mapped areas

# 3448C—Grettum loamy sand, 6 to 12 percent slopes

### Component Description

### Grettum and similar soils

Extent: 65 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash or sandy lacustrine deposits with lamellae

Flooding: None

Shallowest depth to wet zone: 4.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 32 inches; sand E&Bt—32 to 75 inches; sand C—75 to 80 inches: sand

#### Minor Dissimilar Components

#### **Graycalm soils**

Extent: 0 to 15 percent of the mapped areas

## Menahga soils

Extent: 0 to 10 percent of the mapped areas

#### Cress soils

Extent: 0 to 6 percent of the mapped areas

#### Aftad soils

Extent: 0 to 2 percent of the mapped areas

#### Karlsborg soils

Extent: 0 to 2 percent of the mapped areas

# 3516A—Slimlake sandy loam, 0 to 3 percent slopes

# **Component Description**

#### Slimlake and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loamy alluvium over stratified sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: 5.5 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 6 inches; sandy loam Bw—6 to 17 inches; sandy loam 2BC—17 to 42 inches; gravelly sand 2C1—42 to 53 inches; gravelly sand 2C2—53 to 80 inches; sand

### Minor Dissimilar Components

### Cress soils

Extent: 0 to 15 percent of the mapped areas

#### Oesterle soils

Extent: 0 to 15 percent of the mapped areas

#### Scott Lake soils

Extent: 0 to 10 percent of the mapped areas

#### Spoonerhill soils

Extent: 0 to 5 percent of the mapped areas

### Friendship soils

Extent: 0 to 3 percent of the mapped areas

# 3629B—Perida loamy sand, 0 to 4 percent slopes

## Component Description

#### Perida and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Lake plains Position on the landform: Summits Slope range: 0 to 4 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine

deposits Flooding: None

Shallowest depth to wet zone: 3.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.8 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw1,Bw2,Bw3—9 to 43 inches; sand Bw4—43 to 45 inches; loamy sand 2Bt1—45 to 60 inches; clay 2Bt2—60 to 74 inches; silty clay 3C—74 to 80 inches; sand

### Minor Dissimilar Components

#### **Grettum soils**

Extent: 0 to 10 percent of the mapped areas

# Stengel soils

Extent: 0 to 10 percent of the mapped areas

#### Karlsborg soils

Extent: 0 to 5 percent of the mapped areas

#### Meenon soils

Extent: 0 to 5 percent of the mapped areas

# M-W-Miscellaneous water

• This map unit consists of manmade areas that are used for industrial, sanitary, or mining applications and that contain water most of the year. Included in mapping are narrow dikes that surround the water areas.

# W—Water

• This map unit consists of naturally occurring bodies of water, such as rivers, streams, lakes, reservoirs, and ponds.

Table 2.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
			i i
3A	Totagatic-Bowstring-Ausable complex, 0 to 2 percent slopes frequently		İ
	flooded	3,249	0.6
22A	Comstock silt loam, 0 to 3 percent slopes	611	0.1
24A	Poskin silt loam, 0 to 3 percent slopes	278	*
27A	Scott Lake sandy loam, 0 to 3 percent slopes	1,317	0.2
28B	Haugen-Rosholt complex, 2 to 6 percent slopes, very stony	2,530	0.5
28C	Haugen-Rosholt complex, 6 to 12 percent slopes, very stony	15,077	2.8
33B	Chetek sandy loam, 1 to 6 percent slopes	532	*
33C	Chetek sandy loam, 6 to 12 percent slopes	703	0.1
38A	Rosholt sandy loam, 0 to 2 percent slopes	1,180	0.2
38B	Rosholt sandy loam, 2 to 6 percent slopes	3,805	0.7
38C	Rosholt sandy loam, 6 to 12 percent slopes	6,704	1.2
38D	Rosholt sandy loam, 12 to 20 percent slopes	3,498	0.6
42D	Amery sandy loam, 12 to 25 percent slopes, very stony	4,737	0.9
43B	Antigo silt loam, 1 to 6 percent slopes	3,476	0.6
43C	Antigo silt loam, 6 to 15 percent slopes	1,847	0.3
43D	Antigo silt loam, 15 to 30 percent slopes	1,569	0.3
18A	Brill silt loam, 0 to 3 percent slopes	514	*
3A	Crystal Lake silt loam, 0 to 2 percent slopes	631	0.1
53B	Crystal Lake silt loam, 2 to 6 percent slopes	2,064	0.4
53C	Crystal Lake silt loam, 6 to 12 percent slopes	362	*
63E	Crystal Lake silt loam, 20 to 35 percent slopes	11	*
64A	Totagatic-Winterfield complex, 0 to 2 percent slopes, frequently flooded	1,010	0.2
59B	Keweenaw-Sayner-Vilas complex, 2 to 6 percent slopes, stony	1,635	0.3
59C	Keweenaw-Sayner-Vilas complex, 6 to 15 percent slopes, stony	11,315	2.1
69E	Keweenaw-Sayner-Vilas complex, 15 to 45 percent slopes, stony	15,136	2.8
74B	Vilas loamy sand, 0 to 6 percent slopes	429	*
74C	Vilas loamy sand, 6 to 15 percent slopes	329	*
74D	Vilas loamy sand, 15 to 30 percent slopes	45	*
100B	Menahga sand, 0 to 6 percent slopes	9,939	1.8
100B	Menahga sand, 6 to 12 percent slopes	13,033	2.4
100C	Menahga sand, 12 to 30 percent slopes	9,091	1.7
127D	Amery-Rosholt complex, 12 to 20 percent slopes, very stony	8,173	1.5
127E		4,014	0.7
156B	Amery-Rosholt complex, 20 to 45 percent slopes, very stony	3,242	
	Magnor, very stony-Magnor complex, 0 to 4 percent slopes	-	0.6
L57B L57C	Freeon, very stony-Freeon complex, 2 to 6 percent slopes	7,601	1.4
	Freeon, very stony-Freeon complex, 6 to 12 percent slopes	6,346	1.2
.60A	Oesterle sandy loam, 0 to 2 percent slopes	1,668	0.3
L82B	Padus sandy loam, 0 to 6 percent slopes	89	*
L82C	Padus sandy loam, 6 to 15 percent slopes	63	*
L92A	Worcester sandy loam, 0 to 3 percent slopes	379	*
L93A	Minocqua muck, 0 to 2 percent slopes	816	0.1
215B	Pence sandy loam, 0 to 6 percent slopes	140	*
215C	Pence sandy loam, 6 to 15 percent slopes	105	*

See footnote at end of table.

Table 2.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
215D		150	*
315A	Rib silt loam, 0 to 2 percent slopes	85	*
337A	Plover fine sandy loam, 0 to 3 percent slopes	870	0.2
368B	Mahtomedi-Cress complex, 2 to 6 percent slopes	624	0.1
368C	Mahtomedi-Cress complex, 6 to 12 percent slopes	978	0.2
368D	Mahtomedi-Cress complex, 12 to 25 percent slopes	494	*
371A	Croswell loamy sand, 0 to 3 percent slopes	464	*
380B	Cress-Rosholt complex, 2 to 6 percent slopes	683	0.1
380C	Cress-Rosholt complex, 6 to 12 percent slopes	1,413	0.3
380D	Cress-Rosholt complex, 12 to 25 percent slopes	1,751	0.3
383B	Mahtomedi loamy sand, 0 to 6 percent slopes	3,817	0.7
383C 383D	Mahtomedi loamy sand, 6 to 12 percent slopes    Mahtomedi loamy sand, 12 to 30 percent slopes	6,306 5,488	1.2
396B	Friendship-Wurtsmith-Grayling complex, 0 to 6 percent slopes	216	*
397A	Perchlake loamy fine sand, 0 to 2 percent slopes	508	*
399B	Grayling sand, 0 to 6 percent slopes	11,132	2.0
399C	Grayling sand, 6 to 12 percent slopes	7,656	1.4
399D	Grayling sand, 12 to 30 percent slopes	8,334	1.5
405A	Lupton, Cathro, and Tawas soils, 0 to 1 percent slopes	15,054	2.8
406A	Loxley mucky peat, 0 to 1 percent slopes	10,820	2.0
407A	Seelyeville and Markey soils, 0 to 1 percent slopes	20,194	3.7
410A	Seelyeville and Cathro soils, 0 to 1 percent slopes	5,660	1.0
412A	Rifle and Tacoosh soils, 0 to 1 percent slopes	219	*
415A	Greenwood mucky peat, 0 to 1 percent slopes    Graycalm-Menahga complex, 0 to 6 percent slopes	86	*
439B 439C	Graycalm-Menanga complex, 6 to 12 percent slopes	19,802 22,879	3.6
439D	Graycalm-Menanga complex, 0 to 12 percent slopes	12,229	2.2
441C	Freeon, very stony-Cathro complex, 0 to 15 percent slopes	2,315	0.4
442C	Haugen, very stony-Greenwood complex, 0 to 15 percent slopes	10,598	1.9
443D	Amery, very stony-Greenwood complex, 0 to 35 percent slopes	6,929	1.3
461A	Bowstring muck, 0 to 1 percent slopes, frequently flooded	2,482	0.5
484A	Greenwood and Beseman soils, 0 to 1 percent slopes	2,023	0.4
495B	Karlsborg-Grettum-Perida complex, 1 to 6 percent slopes	367	*
495C	Karlsborg-Grettum-Perida complex, 6 to 12 percent slopes	333	*
495D	Karlsborg-Grettum-Perida complex, 12 to 30 percent slopes	264	*
497A	Meenon loamy sand, 0 to 3 percent slopes	373	*
515A 521A	Manitowish sandy loam, 0 to 3 percent slopes    Dody muck, 0 to 2 percent slopes	298	*
521A 524E	Rock outcrop-Frogcreek-Metonga complex, 2 to 45 percent slopes, very	34	,
	stony	680	0.1
542B	Haugen, very stony-Haugen complex, 2 to 6 percent slopes	3,201	0.6
542C	Haugen, very stony-Haugen complex, 6 to 12 percent slopes	8,958	1.6
543B	Anigon silt loam, 2 to 6 percent slopes	3,221	0.6
543C2	Anigon silt loam, 6 to 12 percent slopes, eroded	2,512	0.5
544F	Menahga and Mahtomedi soils, 30 to 45 percent slopes	6,423	1.2
555A	Fordum silt loam, 0 to 2 percent slopes, frequently flooded	698	0.1
574B	Sayner loamy sand, 0 to 6 percent slopes	440	*
574C 574E	Sayner loamy sand, 6 to 15 percent slopes   Sayner loamy sand, 15 to 45 percent slopes	701 689	0.1
579B	Parkfalls sandy loam, 0 to 4 percent slopes, very stony	605	0.1
600A	Haplosaprists and Psammaquents, 0 to 2 percent slopes	622	0.1
615B	Cress sandy loam, 0 to 6 percent slopes	8,042	1.5
615C	Cress sandy loam, 6 to 12 percent slopes	4,568	0.8
615D	Cress sandy loam, 12 to 30 percent slopes	3,300	0.6
623A	Capitola muck, 0 to 2 percent slopes, very stony	666	0.1
624A	Ossmer   silt loam, 0 to 3 percent slopes	719	0.1
632A	Aftad fine sandy loam, 0 to 2 percent slopes	569	0.1
632B	Aftad fine sandy loam, 2 to 6 percent slopes	1,989	0.4
632C	Aftad fine sandy loam, 6 to 12 percent slopes	564	0.1
633F	Pence and Padus soils, 30 to 45 percent slopes	35	*
648B 670C	Sconsin silt loam, 1 to 6 percent slopes   Keweenaw-Pence complex, 6 to 15 percent slopes, stony	1,251	0.2
670E	Keweenaw-Pence complex, 6 to 15 percent slopes, stony	11,260 16,257	3.0
0 / OE	Achievement Tonce complex, 13 to 13 percent Stopes, Stony	10,237	3.0

See footnote at end of table.

Table 2.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
671B	Spoonerhill, stony-Spoonerhill complex, 2 to 6 percent slopes	8,718	1.6
680B	Stanberry-Pence complex, 2 to 6 percent slopes, stony	2,258	0.4
683A	Tipler sandy loam, 0 to 3 percent slopes	228	*
706A	Winterfield-Totagatic complex, 0 to 2 percent slopes, frequently flooded	72	*
724A	Rib-Rock outcrop complex, 0 to 2 percent slopes	625	0.1
726B	Sissabagama loamy sand, 0 to 6 percent slopes	536	*
733A	Wozny muck, 0 to 2 percent slopes, very stony	949	0.2
771A	Lenroot loamy sand, 0 to 3 percent slopes	267	*
827A	Scoba sandy loam, 0 to 3 percent slopes	2,024	0.4
853C	Frogcreek-Stinnett-Wozny complex, 0 to 15 percent slopes, very stony	8,125	1.5
856B	Stinnett silt loam, 0 to 4 percent slopes, very stony	1,846	0.3
857B	Frogcreek silt loam, 2 to 6 percent slopes, very stony	3,531	0.6
857C	Frogcreek silt loam, 6 to 15 percent slopes, very stony	5,915	1.1
873B	Stanberry sandy loam, 1 to 6 percent slopes, very stony	1,269	0.2
873C	Stanberry sandy loam, 6 to 15 percent slopes, very stony	1,985	0.4
873D	Stanberry sandy loam, 15 to 30 percent slopes, very stony	4,980	0.9
905A	Cublake loamy sand, 0 to 3 percent slopes	213	*
926A	Flink loamy sand, 0 to 3 percent slopes	155	*
943D	Stanberry, very stony-Greenwood complex, 0 to 35 percent slopes	338	*
948A	Billyboy silt loam, 0 to 3 percent slopes	355	*
970C	Keweenaw, stony-Pence, stony-Greenwood complex, 0 to 15 percent slopes	1,513	0.3
970E	Keweenaw, stony-Pence, stony-Greenwood complex, 0 to 45 percent slopes	5,043	0.9
1070C	Fremstadt, stony-Cress complex, 6 to 15 percent slopes	10,377	1.9
1070D	Fremstadt, stony-Cress complex, 15 to 30 percent slopes	3,778	0.7
1080B	Spoonerhill-Spoonerhill, stony-Cress complex, 1 to 6 percent slopes	3,600	0.7
1653C	Stanberry-Parkfalls-Wozny complex, 0 to 15 percent slopes, very stony	1,788	0.3
2015	Pits	361	*
2050	Landfill	114	*
3011A	Barronett silt loam, 0 to 2 percent slopes	128	*
3125A	Meehan loamy sand, 0 to 2 percent slopes	1,597	0.3
3126A	Wurtsmith loamy sand, 0 to 3 percent slopes	3,630	0.7
3276A	Au Gres loamy sand, 0 to 3 percent slopes	253	*
3312B	Glendenning, very stony-Glendenning complex, 0 to 4 percent slopes	1,871	0.3
3336A	Fenander fine sandy loam, 0 to 2 percent slopes	263	*
3403A	Loxley, Beseman, and Dawson soils, 0 to 1 percent slopes	6,326	1.2
3424C	Frogcreek-Magroc-Stinnett complex, 0 to 15 percent slopes, very stony,		i
	rocky	3,934	0.7
3446A	Newson muck, 0 to 2 percent slopes	731	0.1
3448B	Grettum loamy sand, 0 to 6 percent slopes	10,350	1.9
3448C	Grettum loamy sand, 6 to 12 percent slopes	609	0.1
3516A	Slimlake sandy loam, 0 to 3 percent slopes	1,433	0.3
3629B	Perida loamy sand, 0 to 4 percent slopes	155	*
M-W	Miscellaneous water	156	*
M – M	Water	33,322	6.1
		546,912	100.0

<sup>\*</sup> Less than 0.1 percent.

# **Use and Management of the Soils**

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as forest land; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; as sites for agricultural waste management; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

# Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

# **Rating Class Terms**

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited*, *somewhat limited*, and *very limited*. The suitability ratings are expressed as *well suited*, *moderately suited*, *poorly suited*, and *unsuited* or as *good*, *fair*, *poor*, and *very poor*.

# **Numerical Ratings**

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate

gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

# **Crops and Pasture**

General management needed for crops and for hay and pasture is suggested in this section. Climate information for the survey area is provided, the estimated yields of the main crops and hay and pasture plants are listed, the system of land capability classification used by the Natural Resources Conservation Service is explained, and prime farmland is described. Planners of management systems for individual fields or farms should consider obtaining specific information from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

#### Climate

Table 3 gives data on temperature and precipitation for the survey area as recorded at the Spooner Experiment Farm during the period from 1971 to 2000. Table 4 shows probable dates of the first freeze in fall and the last freeze in spring. Table 5 provides data on length of the growing season.

In winter, the average temperature is 14.9 degrees F and the average daily minimum temperature is 4.5 degrees. The lowest temperature on record, which occurred on February 16, 1936, is -46 degrees. In summer, the average temperature is 67.1 degrees and the average daily maximum temperature is 79.3 degrees. The highest temperature, which occurred on July 11, 1936, is 110 degrees.

Growing degree days are shown in table 3. They are equivalent to "heat units." During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The total annual precipitation is about 30 inches. Of this total, 19.56 inches, or 65 percent, usually falls in May through September. The growing season for most crops falls within this period. The heaviest 1-day rainfall on record was 4.41 inches on May 9, 1918. Thunderstorms occur on about 35 days each year, and most occur between June and August.

The average seasonal snowfall is 51.8 inches. The greatest snow depth at any one time during the period of record was 40 inches on February 5, 1971. On an average, 107 days per year have at least 1 inch of snow on the ground. The heaviest 1-day snowfall on record was 18 inches on March 25, 1996.

The average relative humidity in midafternoon is about 50 percent in April and May and 70 percent in December. Humidity is higher at night, and the average at dawn is about 90 percent in the summer and 80 percent in the winter. The sun shines approximately 62 percent of the time possible in summer and about 50 percent in winter. The prevailing wind is from the south in most months, but it is from the northwest from December through April. Average windspeed is highest, around 11 miles per hour, in April.

# **Cropland Management Considerations**

The management concerns affecting the use of the soil map units in the survey area for crops are shown in table 6. The main concerns in managing nonirrigated

cropland are conserving moisture, controlling wind erosion and water erosion, and maintaining soil fertility.

Conserving moisture consists primarily of reducing the evaporation and runoff rates and increasing the water infiltration rate. Applying conservation tillage and conservation cropping systems, farming on the contour, stripcropping, establishing field windbreaks, and leaving crop residue on the surface conserve moisture.

Generally, a combination of several practices is needed to control *wind erosion* and *water erosion*. Conservation tillage, stripcropping, field windbreaks, contour farming, conservation cropping systems, crop residue management, terraces, diversions, and grassed waterways help to prevent excessive soil loss.

Measures that are effective in maintaining *soil fertility* include applying fertilizer, both organic and inorganic, including manure; incorporating crop residue or green manure crops into the soil; and using proper crop rotations. Controlling erosion helps to prevent the loss of organic matter and plant nutrients and thus helps to maintain productivity, although the level of fertility can be reduced even in areas where erosion is controlled. All soils used for nonirrigated crops respond well to applications of fertilizer.

Some of the considerations shown in the table cannot be easily overcome. These are channels, flooding, gullies, and ponding.

Additional considerations are as follows:

Lime content, limited available water capacity, limited content of organic matter, potential poor tilth and compaction, and restricted permeability.—These limitations can be minimized by incorporating green manure crops, manure, or crop residue into the soil; applying a system of conservation tillage; and using conservation cropping systems. Also, crops may respond well to additions of phosphate fertilizer to soils that have a high content of lime.

Potential for ground-water contamination.—The proper use of nutrients and pesticides can reduce the risk of ground-water contamination.

Potential for surface-water contamination.—The risk of surface-water contamination can be reduced by the proper use of nutrients and pesticides and by conservation farming practices that reduce the runoff rate.

*Surface crusting.*—This limitation retards seedling development after periods of heavy rainfall.

*Surface rock fragments.*—This limitation causes rapid wear of tillage equipment. It cannot be easily overcome.

*Surface stones.*—Stones or boulders on or near the surface can hinder normal tillage unless they are removed.

Salt content.—In areas where this is a limitation, only salt-tolerant crops should be grown.

On irrigated soils the main management concerns are efficient water use, nutrient management, control of erosion, pest and weed control, and timely planting and harvesting for a successful crop. An irrigation system that provides optimum control and distribution of water at minimum cost is needed. Overirrigation wastes water, leaches plant nutrients, and causes erosion. Also, it can increase wetness and soil salinity.

# **Explanation of Criteria**

Acid soil.—The pH is less than 6.1.

*Channeled.*—The word "channeled" is included in the map unit name.

*Dense layer.*—The bulk density is 1.80 g/cc or greater within the soil profile.

Depth to rock.—The depth to bedrock is less than 40 inches.

*Eroded.*—The word "eroded" is included in the map unit name.

*Excessive permeability.*—Saturated hydraulic conductivity is 42 micrometers per second or more within the soil profile.

Flooding.—Flooding is occasional, frequent, or very frequent.

*Gullied.*—The word "gullied" is included in the map unit name.

*High content of organic matter.*—The surface layer has more than 20 percent organic matter.

*Lime content.*—The pH is 7.4 or more in the surface layer, or the wind erodibility group is 4L.

Limited available water capacity.—The available water capacity calculated to a depth of 60 inches or to a root-limiting layer is 6 inches or less.

Limited content of organic matter.—The content of organic matter is 2 percent or less in the surface layer.

Ponding.—Ponding duration is assigned to the soil. Water is above the surface. Potential poor tilth and compaction.—The content of clay is 27 percent or more in the surface layer.

Potential for ground-water contamination (by nutrients or pesticides).—The depth to a zone in which the soil moisture status is wet is 4 feet or less, the saturated hydraulic conductivity of any layer is more than 42 micrometers per second, or the depth to bedrock is less than 60 inches.

Potential for surface-water contamination (by nutrients or pesticides).—The soil is occasionally, frequently, or very frequently flooded, is subject to ponding, is assigned to hydrologic group C or D and has a slope of more than 2 percent, is assigned to hydrologic group A and has a slope of more than 6 percent, or is assigned to hydrologic group B, has a slope of 3 percent or more, and has a K factor of more than 0.17.

Previously eroded.—The word "eroded" is included in the map unit name.

Restricted permeability.—Saturated hydraulic conductivity is less than 0.42 micrometer per second within the soil profile.

Salt content.—The electrical conductivity is 4 or more in the surface layer or 8 or more within a depth of 30 inches.

Slope (equipment limitation).—The slope is more than 15 percent.

Surface crusting.—The content of clay is 27 percent or more and the content of organic matter is 2 percent or less in the surface layer.

Surface rock fragments (equipment limitation).—The terms describing the texture of the surface layer include any rock fragment modifier, except for gravelly, channery, stony, very stony, extremely stony, bouldery, very bouldery, and extremely bouldery.

Surface stones (equipment limitation).—The word "stony" or "bouldery" is included in the description of the surface layer, or 0.01 percent or more of the surface is covered by boulders.

Water erosion.—Either the slope is 6 percent or more, or the slope is more than 3 percent and less than 6 percent and the surface layer is not sandy.

Wet soil moisture status.—A zone in which the soil moisture status is wet is within 2.5 feet of the surface.

Wind erosion.—The wind erodibility group is 1, 2, 3, or 4L.

Hydrologic groups are described under the heading "Water Features." Erosion factors (e.g., K factor) and wind erodibility groups are described under the heading "Physical Properties."

### **Crop Yield Estimates**

The average yields per acre that can be expected of the principal crops and hay and pasture plants under a high level of management are shown in table 7. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of map units in the survey area also is shown in table 7.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in the table are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

#### **Pasture and Hayland Interpretations**

Under good management, proper grazing is essential for the production of high-quality forage, stand survival, and erosion control. Proper grazing helps plants to maintain sufficient and generally vigorous top growth during the growing season. Brush control is essential in many areas, and weed control generally is needed. Rotation grazing and pasture renovation also are important management practices.

Yield estimates are often provided in animal unit months (AUM), or the amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

The local office of the Natural Resources Conservation Service or the Cooperative Extension Service can provide information about forage yields other than those shown in the yields table.

# **Land Capability Classification**

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not take into account major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for forest land or for engineering purposes.

In the capability system, soils generally are grouped at three levels—capability class, subclass, and unit (USDA, 1961). These categories indicate the degree and kinds of limitations affecting mechanized farming systems that produce the more commonly grown field crops, such as corn, small grain, cotton, hay, and field-grown vegetables. Only class and subclass are used in this survey.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use.

If properly managed, soils in classes 1, 2, 3, and 4 are suitable for the mechanized production of commonly grown field crops and for pasture and forest land. The degree of the soil limitations affecting the production of cultivated crops increases progressively from class 1 to class 4. The limitations can affect levels of production and the risk of permanent soil deterioration caused by erosion and other factors.

Soils in classes 5, 6, and 7 are generally not suited to the mechanized production of commonly grown field crops without special management, but they are suitable for plants that provide a permanent cover, such as grasses and trees. The severity of the soil limitations affecting crops increases progressively from class 5 to class 7.

Areas in class 8 are generally not suitable for crops, pasture, or forest land without a level of management that is impractical. These areas may have potential for other uses, such as recreational facilities and wildlife habitat.

Capability subclasses identify the dominant kind of limitation in the class. They are designated by adding a small letter, e, w, s, or c, to the class numeral, for example, 2e. The letter e shows that the main hazard is the risk of erosion unless a close-growing plant cover is maintained; w shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow, droughty, or stony; and c, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

There are no subclasses in class 1 because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use mainly to pasture, forest land, wildlife habitat, or recreation.

The capability classification of map units in the survey area is given in table 7.

#### Prime Farmland

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. The acreage of high-quality farmland is limited, and the U.S. Department of Agriculture recognizes that government at local, State, and Federal levels, as well as individuals, must encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland soils, as defined by the U.S. Department of Agriculture, are soils that are best suited to food, feed, forage, fiber, and oilseed crops. Such soils have properties that favor the economic production of sustained high yields of crops. The soils need only to be treated and managed by acceptable farming methods. An adequate moisture supply and a sufficiently long growing season are required. Prime farmland soils produce the highest yields with minimal expenditure of energy and economic resources, and farming these soils results in the least damage to the environment.

Prime farmland soils may presently be used as cropland, pasture, or forest land or for other purposes. They either are used for food and fiber or are available for these uses. Urban or built-up land, public land, and water areas cannot be considered prime farmland. Urban or built-up land is any contiguous unit of land 10 acres or more in size that is used for such purposes as housing, industrial, and commercial sites, sites for institutions or public buildings, small parks, golf courses, cemeteries, railroad yards, airports, sanitary landfills, sewage treatment plants, and water-control structures. Public land is land not available for farming in national forests, national parks, military reservations, and state parks.

Prime farmland soils commonly receive an adequate and dependable supply of moisture from precipitation or irrigation. The temperature and growing season are favorable, and the level of acidity or alkalinity and the content of salts and sodium are

acceptable. The soils have few, if any, rocks and are permeable to water and air. They are not excessively erodible or saturated with water for long periods, and they are not frequently flooded during the growing season or are protected from flooding. Slopes range mainly from 0 to 6 percent.

Soils that have a saturated zone high in the profile or soils that are subject to flooding may qualify as prime farmland where these limitations are overcome by drainage measures or flood control. Onsite evaluation is necessary to determine the effectiveness of corrective measures. More information about the criteria for prime farmland can be obtained at the local office of the Natural Resources Conservation Service.

A recent trend in land use has been the conversion of prime farmland to urban and industrial uses. The loss of prime farmland to other uses puts pressure on lands that are less productive than prime farmland.

About 55,841 acres, or 10.2 percent of the survey area, meets the requirements for prime farmland.

The map units in the survey area that meet the requirements for prime farmland are listed in table 8. This list does not constitute a recommendation for a particular land use. On some soils included in the table, measures that overcome limitations are needed. The need for these measures is indicated in parentheses after the map unit name. The location of each map unit is shown on the soil maps. The soil qualities that affect use and management are described in the section "Soil Map Unit Descriptions."

# Windbreaks and Environmental Plantings

Windbreaks protect livestock, buildings, and yards from wind and snow. They also protect fruit trees and gardens, and they furnish habitat for wildlife. Several rows of low- and high-growing broadleaf and coniferous trees and shrubs provide the most protection.

Field windbreaks are narrow plantings made at right angles to the prevailing wind and at specific intervals across the field. The interval depends on the erodibility of the soil. Field windbreaks protect cropland and crops from wind, help to keep snow on the fields, and provide food and cover for wildlife.

Environmental plantings help to beautify and screen houses and other buildings and to abate noise. The plants, mostly evergreen shrubs and trees, are closely spaced. To ensure plant survival, a healthy planting stock of suitable species should be planted properly on a well prepared site and maintained in good condition.

Windbreaks are often planted on land that did not originally support trees. Knowledge of how trees perform on such land can be gained only by observing and recording the performance of trees that have been planted and have survived. Many popular windbreak species are not indigenous to the areas in which they are planted.

Each tree or shrub species has certain climatic and physiographic limits. Within these parameters, a tree or shrub may grow well or grow poorly, depending on the characteristics of the soil. Each tree or shrub has definable potential heights in a given physiographic area and under a given climate. Accurate definitions of potential heights are necessary when a windbreak is planned and designed.

Table 9 shows the height that locally grown trees and shrubs are expected to reach in 20 years on various soils. The estimates in this table are based on measurements and observation of established plantings that have been given adequate care. They can be used as a guide in planning windbreaks and screens. Additional information on planning windbreaks and screens and planting and caring for trees and shrubs can be obtained from local offices of the Natural Resources Conservation Service or the Cooperative Extension Service or from a nursery.

# Conservation Tree/Shrub Suitability Groups

Conservation tree/shrub suitability groups consist of soils in which the kinds and degrees of the hazards and limitations that affect the survival and growth of trees and shrubs in conservation plantings are about the same. The conservation tree/shrub suitability groups assigned to the soils in the survey area are listed in table 10. Descriptions of the groups are provided in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

# **Forest Land Management**

Information about the hazards and limitations that should be considered in areas used as forest land are given in tables 11 through 14.

# **Forest Land Harvest Equipment Considerations**

Table 11 provides information regarding the use of harvest equipment in areas used as forest land.

For most soils spring is the most limiting season. Alternate thawing and freezing during snowmelt cause saturation and low strength of the surface soil layers. When thawing is complete, saturation continues for short periods in well drained soils to nearly all year in very poorly drained soils in depressions. Degrees of wetness are generally proportionate to the depth at which a zone of saturation occurs. This zone generally is lower in summer during the heavy use of moisture by vegetation and is nearer the surface during periods when absorbed precipitation is greater than the vegetation requires. Harvesting during periods of saturation usually results in severe soil damage, except when the soil is frozen. The preferred season for timber harvest on many soils is winter, when wetness and low soil strength can be overcome by freezing.

Considerations shown in table 11 are as follows:

*Slope.*—The upper slope limit is more than 15 percent.

*Flooding.*—The soil is frequently flooded.

Wetness.—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

Depth to hard rock.—The depth to hard bedrock is less than 10 inches.

Rubbly surface.—The word "rubbly" is in the map unit name.

Surface stones.—The words "extremely stony" are in the map unit name.

Surface boulders.—The word "bouldery" is in the map unit name.

Areas of rock outcrop.—Rock outcrop is a named component in the map unit.

Susceptible to rutting and wheel slippage (low strength).—The AASHTO classification is A-6, A-7, or A-8 in any layer at a depth of 20 inches or less.

Poor traction (loose sandy material).—The USDA texture includes sands or loamy sands in any layer at a depth of 10 inches or less.

# **Forest Haul Road Considerations**

Table 12 provides information regarding the use of the soils as haul roads. Haul roads serve as transportation routes from log landings to primary roads. Generally, haul roads are unpaved, but some are graveled.

Considerations shown in the table are as follows:

Slope.—The slope is 8 percent or more.

Flooding.—The soil is frequently flooded.

*Wetness.*—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

Depth to hard rock.—The depth to hard bedrock is less than 20 inches.

Depth to soft rock.—The depth to soft bedrock is less than 20 inches.

Surface boulders.—The word "bouldery" is in the map unit name.

Areas of rock outcrop.—Rock outcrop is a named component in the map unit.

Low bearing strength.—The AASHTO classification is A-6, A-7, or A-8 in any layer at a depth of 20 inches or less.

Rubbly surface.—The word "rubbly" is in the map unit name.

# **Forest Log Landing Considerations**

Table 13 provides information regarding the use of the soils as log landings. Log landings are areas where logs are assembled for transportation. Areas that require little or no cutting, filling, or surface preparation are desired.

Considerations shown in the table are as follows:

Slope.—The slope is more than 3 percent.

Flooding.—The soil is occasionally flooded or frequently flooded.

Wetness.—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

Surface boulders.—The word "bouldery" is in the map unit name.

Areas of rock outcrop.—Rock outcrop is a named component in the map unit.

Susceptible to rutting and wheel slippage (low strength).—The AASHTO

classification is A-6, A-7, or A-8 in any layer at a depth of 20 inches or less.

Rubbly surface.—The word "rubbly" is in the map unit name.

# Forest Land Site Preparation and Planting Considerations

Table 14 provides information regarding considerations affecting site preparation and planting in areas used as forest land.

Considerations shown in the table are as follows:

Slope.—The upper slope limit is more than 15 percent.

Flooding.—The soil is frequently flooded.

*Wetness.*—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

Depth to hard rock.—The depth to hard bedrock is less than 20 inches.

Surface stones.—The word "stony" is in the map unit name.

*Surface boulders.*—The word "bouldery" is in the map unit name.

Areas of rock outcrop.—Rock outcrop is a named component in the map unit.

Water erosion.—The slope is 8 percent or more.

Potential poor tilth and compaction.—The AASHTO classification is A-6 or A-7 in the upper 10 inches.

Rubbly surface.—The word "rubbly" is in the map unit name.

Cobbly surface.—The word "cobbly" is in the map unit name.

# Forest Habitat Types

Joseph A. Kovach, forest ecologist/silviculturist, Division of Forestry, Wisconsin Department of Natural Resources, helped prepare this section.

The forest habitat type classification system (FHTCS) is a site classification system based on the floristic composition of plant communities. The system depends on the

identification of potential climax associations, repeatable patterns in the composition of the understory vegetation, and differential understory species. It groups land units with similar capacity to produce vegetation. The floristic composition of the plant community is used as an integrated indicator of those environmental factors that affect species reproduction, growth, competition, and community development. This classification system enables the recognition of ecologically similar landscape units and vegetation communities. It is a system for classifying forest plant communities and the sites on which they develop.

A forest habitat type is an aggregation of sites (units of land) capable of producing similar late-successional (potential climax) forest plant communities. Each recognizable habitat type represents a relatively narrow segment of environmental variation that is characterized by a certain limited potential for vegetation development. Although at any given time a habitat type can support a variety of disturbance-induced (seral) plant communities, the ultimate product of succession is presumed to be a similar climax community. Field identification of a habitat type provides a convenient label (habitat type name) for a given site and places that site in the context of a larger group of sites that share similar ecological traits.

Forest habitat types are characterized by plant associations, not by individual indicator species. Differential (diagnostic) species combinations in the understory flora are used to identify habitat types at any successional stage, but these combinations have meaning only in the context of the specific habitat types or groups being compared.

The forest habitat types in Washburn County can be identified and interpreted using Field Guide to Forest Habitat Types of Northern Wisconsin, 2nd edition (Kotar and others, 2002). The guide provides keys to habitat type identification based on the presence or absence of differential understory species; describes the characteristic understory species composition, the common forest cover types, and the expected successional trends; and summarizes management implications for each habitat type. Management considerations include inherent site capability (biological potential), potential responses to disturbance, competition, successional trends, potential cover types, and expected suitability and productivity for specific tree species. Additional interpretive information is available in Wisconsin Forest Statistics, 1996: Analysis by Habitat Type Class (Kotar and others, 1999).

Although soil map units do not coincide exactly with habitat types, there is a strong correlation between them. Soil moisture and nutrient regimes are key factors determining habitat type occurrence. Habitat types for the soils in Washburn County are shown in table 15. A single habitat type is considered *dominant* if it constitutes more than 60 percent coverage (one habitat type that has more than 60 percent occurrence). If no habitat types are dominant but two types with 25 to 59 percent occurrence add up to more than 70 percent, then they would be considered *codominant*. A *common* habitat type is listed when the expected frequency of occurrence is 15 to 55 percent and the requirements for identification as codominant are not met.

The following paragraphs briefly describe the habitat types in the county. The types are listed in the following order: dry and nutrient-poor sites; mesic and nutrient-rich sites; wet-mesic sites (nutrient rich to nutrient poor); and wet sites.

#### Region 1 Habitat Types (predominant in Washburn County)

PQGCe—Pinus strobus-Quercus spp./Gaultheria procumbens-Ceanothus americanus habitat type. The common name is Eastern white pine-Oaks/ Wintergreen-New Jersey tea. The presumed potential climax overstory is dominated by eastern white pine and oaks (white oak, bur oak, northern red oak, and northern pin oak). Currently, common cover types include any mixture of jack pine, red pine, northern pin oak, and northern red oak. Aspen is an occasional dominant or associate,

whereas bur oak and white oak are occasional associates. The dominant ground flora commonly includes grasses and sedges, hazelnut, blueberry, blackberries, juneberry, wild rose, bracken fern, wild lily-of-the-valley, wintergreen, northern bedstraw, and oak seedlings.

The moisture regime is dry, and the nutrient regime is poor. The pines (jack pine, red pine, and white pine) exhibit moderate potential productivity. The timber productivity of other species is relatively poor, but the oaks do provide abundant mast for wildlife.

This habitat type is common on outwash plains in the northwestern part of the county.

PArVAm—Pinus strobus-Acer rubrum/Vaccinium angustifolium-Amphicarpa bracteata habitat type. The common name is Eastern white pine-Red maple/ Blueberry-Hog peanut. The presumed potential climax overstory is dominated by eastern white pine, red maple, northern red oak, and white oak. Currently, common cover types include any mixture of aspen, white oak, red oak, and red maple. Overstory associates include white birch, northern pin oak, bur oak, white pine, red pine, and jack pine. The dominant ground flora commonly includes grasses and sedges, hazelnut, juneberry, blackberries, blueberry, bracken fern, bigleaf aster, hog peanut, wild sarsaparilla, and red maple seedlings.

The moisture regime is dry or dry-mesic, and the nutrient regime is poor or medium. All of the pines exhibit excellent potential productivity, but intense competition often limits opportunities for the establishment and maintenance of jack pine. Aspen and paper birch can exhibit good growth and productivity, but the oaks and red maple demonstrate only moderate productivity.

This habitat type is most common on outwash plains in the central part of the county, but it also occurs on moraines and glacial lake plains throughout much of the county.

AVDe—Acer saccharum/Vaccinium angustifolium-Desmodium glutinosum habitat type. The common name is Sugar maple/Blueberry-Pointed-leaved tick trefoil. The presumed potential climax overstory is dominated by sugar maple, red maple, American basswood, and white ash but may also include northern red oak, white oak, and eastern white pine. Currently, common cover types include any mixture of aspen, white oak, red oak, and red maple. Overstory associates include sugar maple, basswood, white pine, and white birch. The dominant ground flora commonly includes grasses and sedges, maple-leaved viburnum, hazelnut, blackberries, bracken fern, bigleaf aster, pointed-leaved tick trefoil, hog peanut, wild sarsaparilla, interrupted fern, ironwood, and red maple and sugar maple seedlings.

The moisture regime is dry-mesic, and the nutrient regime is medium. Trees exhibiting excellent potential productivity include white pine, red pine, white birch, and aspen. Also, white oak, red oak, and red maple can exhibit good growth and productivity. The mesic hardwoods (sugar maple, basswood, and white ash) offer only moderate to poor potential productivity.

This habitat type is common on rolling moraines and outwash plains throughout much of the county.

AAt—Acer saccharum/Athyrium filix-femina habitat type. The common name is Sugar maple/Lady fern. The presumed potential climax overstory is dominated by sugar maple, basswood, white ash, and red maple. Currently, common cover types include any mixture of northern red oak, white oak, red maple, sugar maple, and aspen. Common overstory associates include American basswood, white ash, eastern white pine, and white birch. The dominant ground flora commonly includes grasses and sedges, sugar maple seedlings, ironwood seedlings, hazelnut, bigleaf aster, hog peanut, pointed-leaved tick trefoil, lady fern, interrupted fern, bracken fern, early meadow rue, sweet cicely, trilliums, sessile-leaved bellwort, wild sarsaparilla, and maple-leaved viburnum.

The moisture regime is dry-mesic, and the nutrient regime is medium or rich. Mesic hardwoods (sugar maple, basswood, white ash, and red maple) are very competitive, and potential productivity is good. Red oak, white oak, and white pine demonstrate excellent productivity but require significant disturbance for successful regeneration. Following severe disturbance, aspen and paper birch can demonstrate excellent productivity as pioneers.

This habitat type is common on moraines, outwash plains, and glacial lake plains in the southern part of the county.

ACaCi—Acer saccharum/Caulophyllum thalictroides-Circaea quadrisulcata habitat type. The common name is Sugar maple/Blue cohosh-Enchanter's nightshade. The presumed potential climax overstory is dominated by sugar maple, American basswood, and white ash. Currently, common cover types include any mixture of sugar maple, northern red oak, white oak, and aspen. Common associates are red maple, basswood, white ash, black cherry, and white birch. The dominant ground flora commonly includes grasses and sedges, sugar maple seedlings, bigleaf aster, wild geranium, sweet cicely, lady fern, early meadow rue, trilliums, yellow violets, enchanter's nightshade, hog peanut, maidenhair fern, and black snakeroot.

The moisture regime is mesic or dry-mesic, and the nutrient regime is rich. Most tree species can exhibit excellent growth and productivity on these sites if establishment opportunities exist and competition is controlled. Northern hardwoods demonstrate excellent productive potential and competitive advantages. Oaks commonly are present but require aggressive management (significant disturbance) for regeneration.

This habitat type is somewhat common on moraines, outwash plains, and glacial lake plains in the southern part of the county.

ASal—Acer saccharum/Sanguinaria canadensis-Impatiens capensis habitat type. The common name is Sugar maple/Bloodroot-Jewelweed. The presumed potential climax overstory is dominated by sugar maple, red maple, white ash, green ash, black ash, American basswood, and yellow birch. Currently, common cover types include any mixture of aspen, red maple, oaks (red oak, white oak, and bur oak), basswood, and white birch. The dominant ground flora commonly includes grasses and sedges, lady fern, sweet cicely, jewelweed, bigleaf aster, wood anemone, trilliums, bloodroot, early meadow rue, gooseberry, sensitive fern, interrupted fern, wild geranium, Virginia creeper, Virginia waterleaf, enchanter's nightshade, black snakeroot, hog peanut, and hazelnut.

The moisture regime is wet-mesic or mesic, and the nutrient regime is rich. Although the characteristic dampness can limit tree growth and productivity, most of the commonly occurring tree species can exhibit good potential productivity. Mesic hardwoods (sugar maple, basswood, and white ash) are most competitive in the absence of disturbance, but productivity is only good to moderate. Mid-tolerant hardwoods that require some disturbance for regeneration but that demonstrate good to excellent productive potential are black ash and red maple.

This habitat type occurs on moraines, outwash plains, and glacial lake plains in the southern part of the county.

**ArVRp—Acer rubrum/Vaccinium spp.-Rubus pubescens habitat type.** The common name is Red maple/Blueberries-Dwarf raspberry. The presumed potential climax overstory is dominated by red maple and eastern white pine. Currently, aspen and red maple dominate most stands. Common associates and occasional dominants include white birch, pines (white pine, red pine, and jack pine), and oaks (white oak, bur oak, northern red oak, and northern pin oak). The dominant ground flora commonly includes grasses and sedges, hazelnut, bush honeysuckle, bunchberry, dwarf raspberry, swamp dewberry, bracken fern, interrupted fern, lady fern, bigleaf aster, wild lily-of-the-valley, sessile-leaved bellwort, wild sarsaparilla, and red maple seedlings.

The moisture regime is wet-mesic to dry-mesic, and the nutrient regime is poor or medium. Although the characteristic dampness can limit tree growth and productivity, most of the commonly occurring tree species can exhibit good to moderate potential productivity. White pine offers the greatest growth potential.

This habitat type is mostly on outwash plains and glacial lake plains in the southern part of the county.

# Region 3 Habitat Types (occurring only in northeastern and east-central Washburn County)

PArVAa—Pinus strobus-Acer rubrum/Vaccinium angustifolium-Aralia nudicaulis habitat type. The common name is Eastern white pine-Red maple/Low sweet blueberry-Wild sarsaparilla. The presumed potential climax overstory is dominated by eastern white pine and red maple but may include northern red oak, balsam fir, and white spruce. Currently, common cover types include any mixture of aspen, paper birch, red oak, red maple, white pine, and red pine. The dominant ground flora commonly includes grasses and sedges, hazelnut, blackberries, blueberry, bush honeysuckle, bracken fern, wild sarsaparilla, wild lily-of-the-valley, bigleaf aster, starflower, barren strawberry, wintergreen, and red maple and balsam fir seedlings.

The moisture regime is dry or dry-mesic, and the nutrient regime is poor or medium. The pines exhibit excellent potential productivity, but intense competition often limits opportunities for the establishment and maintenance of jack pine. Aspen, paper birch, and white spruce can exhibit good growth and productivity, whereas red oak and red maple demonstrate only moderate productivity.

This habitat type occurs only in a small area on outwash plains in the east-central part of the county.

AVVb—Acer saccharum/Vaccinium angustifolium-Viburnum acerifolium habitat type. The common name is Sugar maple/Low sweet blueberry-Mapleleaf viburnum. The presumed potential climax overstory is dominated by sugar maple, red maple, and northern red oak. Currently, common cover types include any mixture of aspen, paper birch, red oak, red maple, sugar maple, and eastern white pine. The dominant ground flora commonly includes grasses and sedges, hazelnut, blackberries, mapleleaf viburnum, bracken fern, wild sarsaparilla, bigleaf aster, ironwood, and red maple and sugar maple seedlings.

The moisture regime is dry-mesic, and the nutrient regime is medium. Trees exhibiting excellent potential productivity include red pine, white pine, aspen, and paper birch. Also, red oak, red maple, and white spruce can exhibit good growth and productivity. Although it is common, sugar maple generally is of poor quality.

This habitat type occurs on the moraines and outwash plains in the northeastern part of the county.

ATM—Acer saccharum-Tsuga canadensis/Maianthemum canadense habitat type. The common name is Sugar maple-Eastern hemlock/Wild lily-of-the-valley. The presumed potential climax overstory is dominated by sugar maple, eastern hemlock, and yellow birch. Currently, common cover types include any mixture of sugar maple, red maple, aspen, paper birch, American basswood, northern red oak, white ash, yellow birch, balsam fir, and eastern hemlock. The dominant ground flora commonly includes grasses and sedges, sugar maple seedlings, hazelnut, bush honeysuckle, bracken fern, spinulose shield fern, lady fern, wild sarsaparilla, wild lily-of-the-valley, bigleaf aster, beadlily, and starflower.

The moisture regime is mesic, and the nutrient regime is medium. Trees exhibiting good to excellent productive and competitive potential include sugar maple, basswood, white ash, yellow birch, and hemlock. Others demonstrating excellent productivity but limited competitive abilities include red maple, red oak, and white pine. Following severe disturbance, aspen and paper birch can demonstrate excellent productivity as pioneers.

This habitat type occurs on the moraines and outwash plains in the northeastern part of the county.

ATD—Acer saccharum-Tsuga canadensis/Dryopteris spinulosa habitat type. The common name is Sugar maple-Eastern hemlock/Spinulose shield fern. The presumed potential climax overstory is dominated by sugar maple, eastern hemlock, and yellow birch. Currently, most stands are dominated by sugar maple and aspen. Common overstory associates include basswood, white ash, red maple, red oak, yellow birch, and hemlock. The dominant ground flora commonly includes grasses and sedges, sugar maple seedlings, spinulose shield fern, lady fern, wild lily-of-the-valley, and starflower.

The moisture regime is mesic, and the nutrient regime is medium or rich. Most trees can exhibit excellent growth and productivity if establishment opportunities exist and competition is controlled. Northern hardwoods and hemlock-hardwoods demonstrate excellent productive potential and competitive advantages.

This habitat type occurs on the moraines in the northeastern part of the county. AOCa—Acer saccharum/Osmorhiza claytonii-Caulophyllum thalictroides habitat type. The common name is Sugar maple/Sweet cicely-Blue cohosh. The presumed potential climax overstory is dominated by sugar maple. Currently, most stands are dominated by sugar maple and American basswood and some aspen. Common overstory associates include yellow birch, eastern hemlock, white ash, red maple, and black cherry. The dominant ground flora commonly includes grasses and sedges, sugar maple seedlings, hazelnut, lady fern, spinulose shield fern, bigleaf aster, wild sarsaparilla, trilliums, sweet cicely, blue cohosh, and gooseberries.

The moisture regime is mesic, and the nutrient regime is rich. Most tree species can exhibit excellent growth and productivity if establishment opportunities exist and competition is controlled. Northern hardwoods demonstrate excellent productive potential and competitive advantages.

This habitat type occurs on the moraines in the northeastern part of the county. ACal—Acer saccharum/Caulophyllum thalictroides-Impatiens capensis habitat type. The common name is Sugar maple/Blue cohosh-Jewelweed. The presumed potential climax overstory is dominated by sugar maple. Currently, most stands are dominated by sugar maple, red maple, American basswood, and aspen. Common overstory associates include yellow birch, black ash, green ash, white ash, and hemlock. The dominant ground flora commonly includes grasses and sedges, sugar maple seedlings, lady fern, spinulose shield fern, blue cohosh, sweet cicely, jack-in-the-pulpit, trilliums, and gooseberries.

The moisture regime is wet-mesic or mesic, and the nutrient regime is rich. Although the characteristic dampness can limit tree growth and productivity, most of the commonly occurring tree species can exhibit good to excellent potential productivity. Sugar maple growth and quality are good.

This habitat type occurs on the moraines in the northeastern part of the county. ATAtOn—Acer saccharum-Tsuga canadensis/Athyrium filix-femina-Onoclea sensibilis habitat type. The common name is Sugar maple-Eastern hemlock/Lady fern-Sensitive fern. The presumed potential climax overstory is dominated by sugar maple, red maple, yellow birch, and eastern hemlock. Currently, common cover types include any mixture of red maple, sugar maple, yellow birch, hemlock, basswood, black ash, green ash, and aspen. The dominant ground flora commonly includes grasses and sedges, red maple and sugar maple seedlings, hazelnut, blackberries, lady fern, spinulose shield fern, sensitive fern, horsetails, jewelweed, and bigleaf aster.

The moisture regime is wet-mesic or mesic, and the nutrient regime is medium or rich. Although the characteristic dampness can limit tree growth and productivity, most of the commonly occurring tree species can exhibit good to excellent potential productivity. Sugar maple growth and quality are only moderate.

This habitat type occurs on the moraines in the northeastern part of the county.

TMC—Tsuga canadensis/Maianthemum canadense-Coptis groenlandica habitat type. The common name is Eastern hemlock/Wild lily-of-the-valley-Goldthread. The presumed potential climax overstory is dominated by eastern hemlock, yellow birch, red maple, and sugar maple. Currently, common cover types include any mixture of red maple, balsam fir, aspen, paper birch, sugar maple, yellow birch, and hemlock. The dominant ground flora commonly includes grasses and sedges, sugar maple and red maple seedlings, balsam fir seedlings, hazelnut, bracken fern, clubmosses, bunchberry, wild lily-of-the-valley, wild sarsaparilla, bigleaf aster, beadlily, and starflower.

The moisture regime is wet-mesic or mesic, and the nutrient regime is medium. Although the characteristic dampness can limit tree growth and productivity, most of the commonly occurring tree species can exhibit good potential productivity. Areas of this habitat type are not ideal for management of northern hardwoods because sugar maple growth and quality are limited.

This habitat type occurs on the moraines in the northeastern part of the county. ArAbVC—Acer rubrum-Abies balsamea/Vaccinium spp.-Coptis groenlandica habitat type. The common name is Red maple-Balsam fir/Blueberries-Goldthread. The presumed potential climax overstory is dominated by red maple, balsam fir, white spruce, and hemlock. Currently, common cover types include any mixture of aspen, paper birch, red maple, balsam fir, white spruce, white pine, and red pine. The dominant ground flora commonly includes grasses and sedges, red maple and balsam fir seedlings, hazelnut, blackberries, blueberries, bush honeysuckle, bracken fern, clubmosses, bunchberry, goldthread, wild lily-of-the-valley, wild sarsaparilla, bigleaf aster, beadlily, and starflower.

The moisture regime is wet-mesic to dry-mesic, and the nutrient regime is poor or medium. Although the characteristic dampness can limit tree growth and productivity, most of the commonly occurring tree species can exhibit good to moderate potential productivity.

This habitat type occurs only in a small area on outwash plains in the east-central part of the county.

#### **Forest Lowland Habitat Types**

No forested lowland habitat types have been defined and characterized. Currently, common lowland cover types include any mixture of northern white-cedar, tamarack, black spruce, balsam fir, black ash, red maple, and aspen. To help identify biological potentials, these poorly drained and very poorly drained sites can be subdivided into flood plain (Lfp), mineral soil lowland (Llmin), nonacid organic soil lowland (Lnorg), and acid organic soil lowland (Laorg). Forested lowlands are common throughout the county.

# Recreation

The soils of the survey area are rated in tables 16a and 16b according to limitations that affect their suitability for recreation. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in tables 16a and 16b can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a zone in which the soil moisture status is wet, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a zone in which the soil moisture status is wet, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a zone in which the soil moisture status is wet, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties

that affect trafficability and erodibility. These properties are stoniness, depth to a zone in which the soil moisture status is wet, ponding, flooding, slope, and texture of the surface layer.

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a zone in which the soil moisture status is wet, ponding, flooding, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a zone in which the soil moisture status is wet; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a zone in which the soil moisture status is wet, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

### Wildlife Habitat

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

In table 17, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

The potential of the soil is rated good, fair, poor, or very poor. A rating of *good* indicates that the element or kind of habitat is easily established, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected. A rating of *fair* indicates that the element or kind of habitat can be established, improved, or maintained in most places. Moderately intensive management is required for satisfactory results. A rating of *poor* indicates that limitations are severe for the designated element or kind of habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and must be intensive. A rating of *very poor* indicates that restrictions for the element or kind of habitat are very severe and that unsatisfactory results can be expected. Creating, improving, or maintaining habitat is impractical or impossible.

The elements of wildlife habitat are described in the following paragraphs. *Grain and seed crops* are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of grain and seed crops are corn, soybeans, wheat, oats, and barley.

*Grasses and legumes* are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth

of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flooding, and slope. Soil temperature and soil moisture also are considerations. Examples of grasses and legumes are bromegrass, timothy, orchardgrass, clover, alfalfa, wheatgrass, and birdsfoot trefoil.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of wild herbaceous plants are bluestems, indiangrass, blueberry, goldenrod, lambsquarters, dandelions, blackberry, ragweed, and nightshade.

Hardwood trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and wetness. Examples of these plants are oak, poplar, box elder, birch, maple, green ash, willow, and American elm. Examples of fruit-producing shrubs that are suitable for planting on soils rated *good* are Russian olive and crabapple.

Coniferous plants furnish browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pine, spruce, cedar, and tamarack.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are smartweeds, wild millet, rushes, sedges, bulrushes, wild rice, arrowhead, waterplantain, cattail, prairie cordgrass, bluejoint grass, asters, and beggarticks.

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are waterfowl feeding areas, wildlife watering developments, beaver ponds, and other wildlife ponds.

The habitat for various kinds of wildlife is described in the following paragraphs. Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas include Hungarian partridge, ring-necked pheasant, bobwhite quail, sharp-tailed grouse, meadowlark, field sparrow, killdeer, cottontail rabbit, and red fox.

Habitat for woodland wildlife consists of areas of deciduous and/or coniferous plants and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include wild turkey, ruffed grouse, thrushes, woodpeckers, owls, tree squirrels, porcupine, raccoon, white-tailed deer, and black bear.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, herons, bitterns, rails, kingfishers, muskrat, otter, mink, and beaver.

# **Engineering**

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on

observed performance of the soils and on the data in the tables described under the heading "Soil Properties."

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a zone in which the soil moisture status is wet, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

# **Building Site Development**

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 18a and 18b show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning,

design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a zone in which the soil moisture status is wet, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a zone in which the soil moisture status is wet, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a zone in which the soil moisture status is wet, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a zone in which the soil moisture status is wet, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a zone in which the soil moisture status is wet, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a zone in which the soil moisture status is wet, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and

compacting. Depth to a seasonal zone in which the soil moisture status is wet, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to a zone in which the soil moisture status is wet, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a zone in which the soil moisture status is wet; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a zone in which the soil moisture status is wet, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

# **Sanitary Facilities**

Tables 19a and 19b show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a zone in which the soil moisture status is wet, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth

to a zone in which the soil moisture status is wet, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if a saturated zone is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A trench sanitary landfill is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a zone in which the soil moisture status is wet, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a zone in which the soil moisture status is wet, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or a saturated zone is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow

along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a zone in which the soil moisture status is wet, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or a saturated zone to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

### **Construction Materials**

Tables 20a and 20b give information about the soils as potential sources of gravel, sand, reclamation material, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

Sand and gravel are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 20a, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good*, *fair*, or *poor* as potential sources of gravel or sand. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. The number 0.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

In table 20b, the soils are rated *good*, *fair*, or *poor* as potential sources of reclamation material, roadfill, and topsoil. The features that limit the soils as sources of these materials are specified in the table. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of reclamation material, roadfill, or topsoil. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of

reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a zone in which the soil moisture status is wet, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a zone in which the soil moisture status is wet, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a zone in which the soil moisture status is wet, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

# Water Management

Table 21 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is

determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A wet zone high in the soil profile affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a zone in which the soil moisture status is wet, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

# **Agricultural Waste Management**

Soil properties are important considerations in areas where soils are used as sites for the treatment and disposal of organic waste and wastewater. Selection of soils with properties that favor waste management can help to prevent environmental damage.

Tables 22a and 22b show the degree and kind of soil limitations affecting the treatment of agricultural waste, including municipal and food-processing wastewater and effluent from lagoons or storage ponds. Municipal wastewater is the waste stream from a municipality. It contains domestic waste and may contain industrial waste. It may have received primary or secondary treatment. It is rarely untreated sewage. Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places it is high in content of sodium and chloride. In the context of these tables, the effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste. Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly is very low in content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, heavy metals, and salts are not added in excessive amounts.

The ratings in the tables are for waste management systems that not only dispose of and treat organic waste or wastewater but also are beneficial to crops (application of manure and food-processing waste and application of sewage sludge) and for waste

management systems that are designed only for the purpose of wastewater disposal and treatment (rapid infiltration of wastewater and slow rate treatment of wastewater).

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect agricultural waste management. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Rapid infiltration of wastewater is a process in which wastewater applied in a level basin at a rate of 4 to 120 inches per week percolates through the soil. The wastewater may eventually reach the ground water. The application rate commonly exceeds the rate needed for irrigation of cropland. Vegetation is not a necessary part of the treatment; hence, the basins may or may not be vegetated. The thickness of the soil material needed for proper treatment of the wastewater is more than 72 inches. As a result, geologic and hydrologic investigation is needed to ensure proper design and performance and to determine the risk of ground-water pollution.

The ratings in the table are based on the soil properties that affect the risk of pollution and the design, construction, and performance of the system. Depth to a saturated zone, ponding, flooding, and depth to bedrock or a cemented pan affect the risk of pollution and the design and construction of the system. Slope, stones, and cobbles also affect design and construction. Permeability and reaction affect performance. Permanently frozen soils are unsuitable for waste treatment.

Slow rate treatment of wastewater is a process in which wastewater is applied to land at a rate normally between 0.5 inch and 4.0 inches per week. The application rate commonly exceeds the rate needed for irrigation of cropland. The applied wastewater is treated as it moves through the soil. Much of the treated water may percolate to the ground water, and some enters the atmosphere through evapotranspiration. The applied water generally is not allowed to run off the surface. Waterlogging is prevented either through control of the application rate or through the use of tile drains, or both.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, and the application of waste. The properties that affect absorption include the sodium adsorption ratio, depth to a saturated zone, ponding, available water capacity, permeability, depth to bedrock or a cemented pan, reaction, the cation-exchange capacity, and slope. Reaction, the sodium adsorption ratio, salinity, and bulk density affect plant growth and microbial activity. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood of wind erosion or water erosion. Stones, cobbles, a wet zone in the soil profile, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Application of manure and food-processing waste not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. Manure is the excrement of livestock and poultry, and food-processing waste is damaged fruit and vegetables and the peelings, stems, leaves, pits, and soil particles removed in food preparation. The manure and the food-processing waste are either solid, slurry, or liquid. Their nitrogen content

varies. A high content of nitrogen limits the application rate. Toxic or otherwise dangerous wastes, such as those mixed with the lye used in food processing, are not considered in the ratings.

The ratings are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the waste is applied, and the method by which the waste is applied. The properties that affect absorption include permeability, depth to a saturated zone, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, and available water capacity. The properties that affect plant growth and microbial activity include reaction, the sodium adsorption ratio, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a wet zone in the soil profile, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Application of sewage sludge not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. In the context of this table, sewage sludge is the residual product of the treatment of municipal sewage. The solid component consists mainly of cell mass, primarily bacteria cells that developed during secondary treatment and have incorporated soluble organics into their own bodies. The sludge has small amounts of sand, silt, and other solid debris. The content of nitrogen varies. Some sludge has constituents that are toxic to plants or hazardous to the food chain, such as heavy metals and exotic organic compounds, and should be analyzed chemically prior to use.

The content of water in the sludge ranges from about 98 percent to less than 40 percent. The sludge is considered liquid if it is more than about 90 percent water, slurry if it is about 50 to 90 percent water, and solid if it is less than about 50 percent water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the sludge is applied, and the method by which the sludge is applied. The properties that affect absorption, plant growth, and microbial activity include permeability, depth to a saturated zone, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, available water capacity, reaction, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a wet zone in the soil profile, ponding, and flooding can hinder the application of sludge. Permanently frozen soils are unsuitable for waste treatment.

Table 3.--Temperature and Precipitation (Recorded in the period 1971-2000 at Spooner Experiment Farm, Wisconsin)

	Temperature						Precipitation				
	Average Average daily maximum minimum	   	   	2 years in   10 will have		number of	  Average   	2 years in 10 will have		 	
		i	Maximum	   Minimum  temperature   lower   than	Less				Average  number of  days with  0.10 inch   or more	snowfall	
	°F	°F	°F	°F	°F	Units	In	In	In		In
January	   21.5 	   -0.1 	   10.7 	46	   -36 	   0 	   0.87 	   0.39 	   1.33 	   2 	   13.8 
February	29.0	6.4	17.7	52	-33	2	.66	.22	1.04	2	7.5
March	   40.6 	   18.7 	   29.7 	67	   -18 	   29 	   1.43 	   .78 	   2.02 	   3 	   8.3 
April	56.6	31.5	44.1	81	7	187	2.20	.95	3.43	5	2.6
May	   70.2 	   43.2	   56.7 	87	   23	   514 	   3.05	   1.79	   4.27	   6 	.0
June	77.6	52.2	64.9	91	32	743	3.98	2.72	5.15	7	.0
July	   81.4 	   57.2	   69.3	95	   40	908	   4.21	   2.07	   6.09	   6 	.0
August	78.9	55.1	67.0	92	36	837	4.64	2.83	6.33	7	.0
September	   69.7 	   46.7	   58.2 	   87	   27 	   545 	   3.68	   1.81	   5.45	   7 	.0
October	   57.8	35.9	46.9	80	   15	247	2.58	1.42	3.68	   6	.7
November	   39.1	22.8	31.0	65	   -8	   33	1.90	.72	2.92	   4	7.8
December	   25.2	   7.2	   16.2	48	   -28	   1	   .85	.38	1.27	   2	11.0
Yearly:	   	   	   		   	   	   	   	   	   	   
Average	   54.0 	   31.4 	   42.7 		 	 	 	 	 	   	
Extreme	   101	   -44	 	95	   -37	 	 	 	 	 	 
Total		 				4,048	30.05	24.95	35.02	57	51.8

<sup>\*</sup> A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (40 degrees F).

Table 4.--Freeze Dates in Spring and Fall
(Recorded in the period 1971-2000 at Spooner Experiment Farm, Wisconsin)

İ	Temper		ature			
Probability	24	o <sub>F</sub>	28	o <sub>F</sub>	32	o <sub>F</sub>
<u> </u>	or lo	wer	or lo	wer	or lo	wer
Last freezing			 		i I	
temperature   in spring:					 	
1 year in 10						
later than	May	6	May	20	June	9
2 years in 10						
later than	May	2	May	15	June	2
5 years in 10	_		į	_	į	
later than	Apr.	24	May	7	May	20
First freezing						
temperature   in fall:					   	
1 year in 10						
earlier than	Sept.	30	Sept.	. 18	Sept.	10
2 years in 10	0 1-	_		0.0		1.4
earlier than	Oct.	5	Sept.	. 22	Sept.	14
5 years in 10	Oct.	16	Comb	2.0	Cont	22
earlier than	UCT.	ТР	Sept.	. 30	Sept.	22

Table 5.--Growing Season

(Recorded in the period 1971-2000 at Spooner Experiment Farm, Wisconsin)

	Daily minimum temperature during growing season		
Probability			
	Higher	Higher	Higher
	than	than	than
	24 <sup>O</sup> F	28 <sup>O</sup> F	32 °F
	Days	Days	Days
9 years in 10	150	126	102
8 years in 10	158	133	109
5 years in 10	174	145	123
2 years in 10	189	158	137
1 year in 10	197	164	144

Table 6.--Cropland Management Considerations

(See text for a description of the considerations listed in this table)

Map symbol and	Cropland management
soil name	considerations
3A:	 
Totagatic	Flooding
	Excessive permeability
	High content of organic matter   Limited available water capacity
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
Bowstring	Flooding
	Excessive permeability
	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
Augabla	
Ausable	Flooding   Excessive permeability
	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	   Wet soil moisture status
22A:	
Comstock	Acid soil
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
0.43	
24A: Poskin	Excessive permeability
POSKIII	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
27A:	
Scott Lake	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
28B:	
Haugen, very stony	
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination   Restricted permeability
	Surface stones
	Water erosion
	Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
28B:	
Haugen	Acid soil
j	Dense layer
İ	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Water erosion
	Wet soil moisture status
	Wind erosion
Rosholt, very stony	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wind erosion
Rosholt	Excessive permeability
İ	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
28C:	
Haugen, very stony	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wet soil moisture status Wind erosion
i	wind erosion
Haugen	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Water erosion
	Wet soil moisture status
i i	Wind amonion
	Wind erosion
Rosholt, very stony	
Rosholt, very stony	Excessive permeability Limited available water capacity
Rosholt, very stony	Excessive permeability Limited available water capacity Potential for ground-water contamination
Rosholt, very stony	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination
Rosholt, very stony	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones
Rosholt, very stony	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion
Rosholt, very stony	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones
Rosholt, very stony	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion Excessive permeability
	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion  Excessive permeability Limited available water capacity
	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion  Excessive permeability Limited available water capacity Potential for ground-water contamination
	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion  Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination
	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion  Excessive permeability Limited available water capacity Potential for ground-water contamination

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
33B:	
Chetek	Acid soil
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
33C: Chetek	Acid soil
Checek	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
38A:	
Rosholt	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
İ	
38B:	
Rosholt	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
38C:	
Rosholt	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
202	
38D: Rosholt	   Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for ground-water contamination  Potential for surface-water contamination
	•
	Water erosion Wind erosion
	wind erosion 
42D:	
Amery	Acid soil
j	Slope
	Dense layer
	Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
43B:	
Antigo	
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
40.5	
43C:	T
Antigo	
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
43D:	
	Clana
Antigo	-
	Excessive permeability  Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	water erosion
48A:	
Brill	Excessive permeability
BIIII	Potential for ground-water contamination
	Wet soil moisture status
	wet soil moistule status
63A:	
Crystal Lake	Acid soil
01/2001 1000	Potential for ground-water contamination
	Wet soil moisture status
63B:	
Crystal Lake	Acid soil
- i	Potential for ground-water contamination
i	Potential for surface-water contamination
	Water erosion
	Wet soil moisture status
63C:	
Crystal Lake	Acid soil
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wet soil moisture status
63E:	
Crystal Lake	
	Slope
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
643	
64A:	Planting
Totagatic	
	Excessive permeability
	High content of organic matter
	Limited available water capacity
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
	<u> </u>
64A:	
Winterfield	Flooding
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status Wind erosion
	Wind erosion
69B:	
Keweenaw	Limited available water capacity
	Limited content of organic matter  Potential for ground-water contamination
	Surface stones
	Wind erosion
Correct	Acid soil
Sayner	ACIG SOII   Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Surface stones
	Wind erosion
Vilas	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Surface stones
	Wind erosion
69C:	
Keweenaw	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Surface stones Water erosion
	Wind erosion
_	
Sayner	Acid soil Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wind erosion
Vilas	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion   Wind erosion
69E:	
Keweenaw	Slope
	Limited available water capacity
	Limited content of organic matter  Potential for ground-water contamination
	Surface stones
	Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
	<u> </u>
69E:	
Sayner	Acid soil
	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones Water erosion
	Wind erosion
	Hill Globion
Vilas	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion Wind erosion
	wind erosion
74B:	
Vilas	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
74C:	
Vilas	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
74D:	
Vilas	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
100B:	
Menahga	Acid soil
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Wind erosion
100C:	[ 
Menahga	Acid soil
-	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
100D	
100D: Menahga	Acid soil
nonungu	Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
127D:	
Amery	Acid soil
	Slope
	Dense layer   Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wind erosion
Rosholt	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination Surface stones
	Water erosion
	Wind erosion
127E:	
Amery	Acid soil
	Slope
	Dense layer
	Potential for surface-water contamination
	Restricted permeability Surface stones
	Water erosion
	Wind erosion
Rosholt	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination   Surface stones
	Water erosion
	Wind erosion
156B:	
Magnor, very stony	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Surface stones Water erosion
	Wet soil moisture status
	•

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
156B:	
Magnor	
	Dense layer  Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
i	Water erosion
	Wet soil moisture status
157B:	Para la la la la la la la la la la la la la
Freeon, very stony	Dense layer   Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Surface stones
İ	Water erosion
	Wet soil moisture status
The same	Para 1
Freeon	Dense layer   Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
i	Water erosion
	Wet soil moisture status
157C:	
Freeon, very stony	Dense layer   Potential for ground-water contamination
	Potential for ground-water contamination  Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wet soil moisture status
Freeon	Dense layer
riecon	Potential for ground-water contamination
	Potential for surface-water contamination
İ	Restricted permeability
	Water erosion
	Wet soil moisture status
160A:	
Oesterle	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
İ	Wet soil moisture status
	Wind erosion
182B:	
Padus	Acid soil
-	Excessive permeability
	Potential for ground-water contamination
İ	Potential for surface-water contamination
1	Water erosion
	Wind erosion
182C:	
Padus	Acid soil
i	Excessive permeability
İ	Potential for ground-water contamination
İ	Potential for surface-water contamination
	Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

25	
Map symbol and soil name	Cropland management considerations
DOLL HAMO	
192A:	
Worcester	Acid soil
	Excessive permeability   Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
	Wind erosion
193A:	
Minocqua	Excessive permeability
-	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
215B:	
Pence	Acid soil
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination  Potential for surface-water contamination
	Water erosion
	Wind erosion
215C:	
Pence	Acid soil Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
215D:	
Pence	Acid soil
	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination  Potential for surface-water contamination
	Water erosion
	Wind erosion
2153	
315A: Rib	Excessive permeability
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
337A:	 
Plover	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
	Wind erosion
368B:	 
Mahtomedi	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
260D -	
368B: Cress	Acid soil
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter  Potential for ground-water contamination
	Water erosion
	Wind erosion
368C:	
Mahtomedi	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination  Potential for surface-water contamination
	Water erosion
	Wind erosion
Cress	   Acid soil
C1688	ACIG SOII   Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination Water erosion
	Wind erosion
260D.	
368D: Mahtomedi	   Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter  Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
Cress	Acid soil
	Slope
	Excessive permeability
	Limited available water capacity   Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion 
371A:	
Croswell	
	Limited available water capacity  Potential for ground-water contamination
	Wet soil moisture status
	Wind erosion
380B:	
Cress	Acid soil
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter   Potential for ground-water contamination
	Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Man many 2 - 2 - 2	
Map symbol and soil name	Cropland management considerations
SOII name	Considerations
2005	
380B: Rosholt	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
380C:	
Cress	Acid soil
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
Rosholt	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
2000	
380D: Cress	Acid soil
02000	Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
Rosholt	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
383B:	
Mahtomedi	Excessive permeability
	Limited available water capacity
j	Limited content of organic matter
	Potential for ground-water contamination
	Wind erosion
383C:	 
Mahtomedi	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
002D.	
383D: Mahtomedi	Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
396B:	
Friendship	Excessive permeability
	Limited available water capacity
	Limited content of organic matter  Potential for ground-water contamination
	Wind erosion
Wurtsmith	Acid soil
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wet soil moisture status
	Wind erosion
Grayling	Acid soil
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
397A:	
Perchlake	Excessive permeability
	Limited available water capacity Limited content of organic matter
	Potential for ground-water contamination
	Wet soil moisture status
	Wind erosion
399B:	
Grayling	Acid soil
<u>/</u> g	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
399C:	
Grayling	
	Excessive permeability
	Limited available water capacity  Potential for ground-water contamination
	Potential for ground-water contamination
	Water erosion
	Wind erosion
399D:	
Grayling	Acid soil
	Slope
Grayiing	
Glayling	Excessive permeability
GLAYIING	Limited available water capacity
Glayling	Limited available water capacity Potential for ground-water contamination
Glayling	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination
Graying	Limited available water capacity Potential for ground-water contamination

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
405A:	
Lupton	High content of organic matter  Ponding  Potential for ground-water contamination  Potential for surface-water contamination  Wet soil moisture status
Cathro	High content of organic matter  Ponding  Potential for ground-water contamination  Potential for surface-water contamination  Wet soil moisture status
Tawas	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
406A:	
Loxley	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
407A: Seelyeville	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Markey	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
410A:	
	High content of organic matter    Ponding   Potential for ground-water contamination   Potential for surface-water contamination   Wet soil moisture status
Cathro	High content of organic matter   Ponding   Potential for ground-water contamination   Potential for surface-water contamination   Wet soil moisture status
412A:	
	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management	
soil name	considerations	
	<u> </u>	
412A:		
Tacoosh	High content of organic matter   Ponding	
	Potential for ground-water contamination	
	Potential for surface-water contamination	
	Wet soil moisture status	
415A:		
Greenwood	High content of organic matter	
	Ponding	
	Potential for ground-water contamination   Potential for surface-water contamination	
	Wet soil moisture status	
439B:		
Graycalm	Excessive permeability	
	Limited available water capacity	
	Limited content of organic matter	
	Potential for ground-water contamination   Wind erosion	
	wind erosion	
Menahga	Acid soil	
	Excessive permeability	
	Limited available water capacity	
	Limited content of organic matter	
	Potential for ground-water contamination   Wind erosion	
439C: Graycalm	   Excessive permeability	
Gray Carm	Limited available water capacity	
	Limited content of organic matter	
	Potential for ground-water contamination	
	Potential for surface-water contamination	
	Water erosion   Wind erosion	
	wind erosion	
Menahga	Acid soil	
	Excessive permeability	
	Limited available water capacity	
	Limited content of organic matter   Potential for ground-water contamination	
	Potential for surface-water contamination	
	Water erosion	
	Wind erosion	
439D:		
Graycalm	Slope	
	Excessive permeability   Limited available water capacity	
	Limited content of organic matter	
	Potential for ground-water contamination	
	Potential for surface-water contamination	
	Water erosion	
	Wind erosion	
Menahga	!	
	Slope	
	Excessive permeability	
	Limited available water capacity	
	Limited content of organic matter   Potential for ground-water contamination	
	Potential for surface-water contamination	
	Water erosion	
	Wind erosion	

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
441C:	
Freeon	   Dense layer
riceon	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wet soil moisture status
	Wet soil moisture status
Cathro	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
	Wind erosion
442C:	
Haugen	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wet soil moisture status
	Wind erosion
Greenwood	Excessive permeability
G1eenwood	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
443D: Amery	   Acid soil
Amery	Slope
	Dense layer
	Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wind erosion
Greenwood	Excessive permeability
	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
461A:	
Bowstring	Flooding
-	Excessive permeability
	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
484A:	
Greenwood	Excessive permeability
	High content of organic matter
İ	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
Beseman	High content of organic matter
	Ponding
İ	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
495B:	
*yos:   Karlsborg	Excessive permeability
,	Limited available water capacity
İ	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Wet soil moisture status
	Wind erosion
Grettum	Excessive permeability
İ	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
Perida	Excessive permeability
101144	Limited available water capacity
i	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Wind erosion
495C:	
Karlsborg	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Water erosion
	Wet soil moisture status Wind erosion
Grettum	Excessive permeability
	Limited available water capacity
l l	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion Wind erosion
i	
Perida	
	Limited available water capacity
	Timited
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for ground-water contamination Potential for surface-water contamination
	Potential for ground-water contamination Potential for surface-water contamination Restricted permeability
	Potential for ground-water contamination Potential for surface-water contamination

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
495D:	
Karlsborg	Slope
3	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Water erosion
	Wet soil moisture status
	Wind erosion
Grettum	Slope
	Excessive permeability
	Limited available water capacity  Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
Perida	Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination Restricted permeability
	Water erosion
	Wind erosion
4073	
497A: Meenon	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Wet soil moisture status Wind erosion
515A:	
Manitowish	Acid soil
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
521A:	
Dody	
	High content of organic matter
	Limited available water capacity Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Wet soil moisture status
524E:	
Rock outcrop.	

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
524E:	
Frogcreek	Acid soil   Dense layer   Potential for ground-water contamination   Potential for surface-water contamination   Surface stones   Water erosion
	Wet soil moisture status
Metonga	Acid soil   Slope   Depth to rock   Limited available water capacity   Potential for ground-water contamination   Potential for surface-water contamination   Restricted permeability   Surface stones   Water erosion
	Wind erosion
542B: Haugen, very stony	     Acid soil
	Dense layer   Potential for ground-water contamination   Potential for surface-water contamination   Restricted permeability   Surface stones   Water erosion   Wet soil moisture status   Wind erosion
Haugen	Acid soil Dense layer Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Water erosion Wet soil moisture status Wind erosion
542C:	 
Haugen, very stony	Acid soil   Dense layer   Potential for ground-water contamination   Potential for surface-water contamination   Restricted permeability   Surface stones   Water erosion   Wet soil moisture status   Wind erosion
Haugen	Acid soil   Dense layer   Potential for ground-water contamination   Potential for surface-water contamination   Restricted permeability   Water erosion   Wet soil moisture status   Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
i	
543B:	
Anigon	Excessive permeability
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
543C2:	
Anigon	Excessive permeability
	Potential for ground-water contamination Potential for surface-water contamination
	Previously eroded
	Water erosion
544F:   Menahga	Acid soil
	Slope
İ	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination Potential for surface-water contamination
	Water erosion
	Wind erosion
Mahtomedi	Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
555A:	
Fordum	Flooding
	Excessive permeability
	Ponding
	Potential for ground-water contamination Potential for surface-water contamination
	Wet soil moisture status
574R.	
574B:   Sayner	Acid soil
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
574C:	
Sayner	Acid soil
I	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination  Potential for surface-water contamination
	Potential for surface-water contamination Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
574E:	  -   Agid goil
Sayner	Acid soil   Slope   Excessive permeability   Limited available water capacity   Potential for ground-water contamination   Potential for surface-water contamination   Water erosion   Wind erosion
579B:	 
Parkfalls	Dense layer Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wet soil moisture status Wind erosion
600A:	
Haplosaprists	Onsite investigation required
Psammaquents	Onsite investigation required
615B: Cress	Acid soil  Excessive permeability  Limited available water capacity  Limited content of organic matter  Potential for ground-water contamination  Water erosion  Wind erosion
615C: Cress	Acid soil  Excessive permeability Limited available water capacity Limited content of organic matter  Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
615D: Cress	Acid soil   Slope   Excessive permeability   Limited available water capacity   Limited content of organic matter   Potential for ground-water contamination   Potential for surface-water contamination   Water erosion   Wind erosion
623A: Capitola	High content of organic matter Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Surface stones Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
624A: Ossmer	Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
632A: Aftad	   Potential for ground-water contamination   Wet soil moisture status   Wind erosion
632B: Aftad	Potential for ground-water contamination   Potential for surface-water contamination   Water erosion   Wet soil moisture status   Wind erosion
632C: Aftad	Potential for ground-water contamination   Potential for surface-water contamination   Water erosion   Wet soil moisture status   Wind erosion
633F: Pence	Acid soil   Slope   Excessive permeability   Limited available water capacity   Potential for ground-water contamination   Potential for surface-water contamination   Water erosion   Wind erosion
Padus	Acid soil   Slope   Excessive permeability   Potential for ground-water contamination   Potential for surface-water contamination   Water erosion   Wind erosion
648B: Sconsin	Dense layer  Excessive permeability  Limited available water capacity  Potential for ground-water contamination  Potential for surface-water contamination  Restricted permeability  Water erosion  Wet soil moisture status
670C: Keweenaw	Limited available water capacity   Limited content of organic matter   Potential for ground-water contamination   Potential for surface-water contamination   Surface stones   Water erosion   Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
670C:	
Pence	Acid soil
	Excessive permeability Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones Water erosion
	Wind erosion
670E:	
Keweenaw	Slope
	Limited available water capacity
	Limited content of organic matter  Potential for ground-water contamination
j	Potential for surface-water contamination
	Surface stones
	Water erosion Wind erosion
	WING GLOSION
Pence	Acid soil
	Slope   Excessive permeability
	Limited available water capacity
İ	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones Water erosion
j	Wind erosion
CELL	
671B: Spoonerhill, stony	Dense layer
Specifically, Seeily	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Surface stones Water erosion
	Wet soil moisture status
Spoonerhill	Dense layer
i	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination Water erosion
j	Wet soil moisture status
680B:	
Stanberry, stony	Dense layer
Stamperry, Stony	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination  Potential for surface-water contamination
	Surface stones
İ	Water erosion
	Wet soil moisture status
· ·	Wind erosion
Pence, stony	Acid soil
	Excessive permeability
	Limited available water capacity  Potential for ground-water contamination
i	Potential for surface-water contamination
İ	Surface stones
	Water erosion
	Wind erosion
l de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
683A: Tipler	Acid soil Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
706A: Winterfield	Flooding   Excessive permeability   Limited available water capacity   Potential for ground-water contamination   Potential for surface-water contamination   Wet soil moisture status   Wind erosion
Totagatic	Flooding Excessive permeability Limited available water capacity Limited content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
724A: Rib	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Rock outcrop.	
726B: Sissabagama	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
733A: Wozny	Dense layer   High content of organic matter   Ponding   Potential for ground-water contamination   Potential for surface-water contamination   Surface stones   Wet soil moisture status
771A: Lenroot	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wet soil moisture status Wind erosion
827A: Scoba	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
353C:	
Frogcreek	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
Stinnett	   Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
Wozny	   Dense layer
	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Wet soil moisture status
356B:	 
Stinnett	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
857B:	
Frogcreek	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
857C:	[ 
Frogcreek	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
873B:	
Stanberry	Dense layer
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Cropland management considerations
Dense layer
Slope   Dense layer   Limited available water capacity   Limited content of organic matter   Potential for ground-water contamination   Potential for surface-water contamination   Surface stones   Water erosion   Wet soil moisture status   Wind erosion
Acid soil  Excessive permeability  Limited available water capacity  Limited content of organic matter  Potential for ground-water contamination  Wind erosion
Acid soil  Excessive permeability  Limited available water capacity  Limited content of organic matter  Potential for ground-water contamination  Wet soil moisture status  Wind erosion
Slope   Dense layer   Limited available water capacity   Limited content of organic matter   Potential for ground-water contamination   Potential for surface-water contamination   Surface stones   Water erosion   Wet soil moisture status   Wind erosion
High content of organic matter
Potential for ground-water contamination   Potential for surface-water contamination   Wet soil moisture status
Excessive permeability Potential for ground-water contamination Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
970C:	
Keweenaw	Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion
Pence	Acid soil  Excessive permeability  Limited available water capacity  Potential for ground-water contamination  Potential for surface-water contamination  Surface stones  Water erosion  Wind erosion
Greenwood	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
970E:	
Keweenaw	Slope   Limited available water capacity   Limited content of organic matter   Potential for ground-water contamination   Potential for surface-water contamination   Surface stones   Water erosion
Pence	Acid soil   Slope   Excessive permeability   Limited available water capacity   Potential for ground-water contamination   Potential for surface-water contamination   Surface stones   Water erosion   Wind erosion
Greenwood	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
1070C:	
Fremstadt	Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
1070C:	
Cress	Acid soil
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination Water erosion
	Wind erosion
	Wind erosion
1070D:	
Fremstadt	Slope
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination  Potential for surface-water contamination
	Surface stones
	Water erosion
Cress	Acid soil
	Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter  Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
1080B:	
Spoonerhill	Dense layer
	Limited available water capacity
	Limited content of organic matter   Potential for ground-water contamination
	Water erosion
	Wet soil moisture status
Spoonerhill, stony	
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination   Surface stones
	Water erosion
	Wet soil moisture status
Cress	·
	Excessive permeability
	Limited available water capacity Limited content of organic matter
	Limited content or organic matter   Potential for ground-water contamination
	Water erosion
	Wind erosion
1653C:	
Stanberry	:
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination   Surface stones
	Surface stones   Water erosion
	Wet soil moisture status
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Table 0Clopiand Ma	magement Considerationscontinued
Map symbol and soil name	Cropland management considerations
1653C:	
Parkfalls	Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion
Wozny	Wet soil moisture status   Wind erosion     Dense layer
-	High content of organic matter  Ponding  Potential for ground-water contamination  Potential for surface-water contamination  Surface stones
	Wet soil moisture status
2015. Pits	
2050. Landfill	
3011A: Barronett	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
3125A: Meehan	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
3126A: Wurtsmith	Acid soil Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion
3276A: Au Gres	Acid soil  Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wet soil moisture status Wind erosion
3312B: Glendenning, very stony	Acid soil Dense layer Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Surface stones Water erosion Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
i	
3312B: Glendenning	Acid soil
Grendenning	Dense layer
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Water erosion
	Wet soil moisture status
22267.	
3336A: Fenander	Ponding
r changer	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
	Wind erosion
24023	
3403A: Loxley	Excessive permeability
· -2	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
Beseman	High content of organic matter
Deseman	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
Dawson	Acid soil
	Excessive permeability
	High content of organic matter
	Ponding
	Potential for ground-water contamination   Potential for surface-water contamination
	Wet soil moisture status
3424C:	
Frogcreek	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination Surface stones
	Water erosion
	Wet soil moisture status
Magroc	·
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability Surface stones
	Surface stones   Water erosion
	Water erosion   Wet soil moisture status
	Net boll Melbeare beacab
Stinnett	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
Rock outcrop.	 

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
3446A:	
Newson	Acid soil
İ	Excessive permeability
	High content of organic matter
	Limited available water capacity
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
3448B:	
Grettum	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
3448C:	
Grettum	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Water erosion
	Wind erosion
3516A:	
Slimlake	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
3629B:	
Perida	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Restricted permeability Wind erosion
	HING GLOSTON
M-W.	
Miscellaneous water	
w.	

## Table 7. -- Land Capability and Yields per Acre of Crops and Pasture

(Yields are those that can be expected under a high level of management. They are for nonirrigated areas. Y very stony map units are based on the assumption that the stones have been removed. Absence of a yield soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol	Land	Soybeans	Timothy-red	Bromegrass-	Corn	  Corn silage	- Ke
		Bu	Tons	Tons	Bu	Tons	1
3A	w7 w7	1	!	 	1		
22AComstock	2w	30	3.4	9. E	06	14	
24A Poskin	2w	7 8	3.2	3.4	8	14	
27AScott Lake		28	3.5	8.4.	8 22		
Haugen, very stony Haugen, very stony Rosholt, very stony Rosholt	4	78	м	ε 4.	8 5	1. 4.	
Haugen, very stony Haugen, very stony Rosholt, very stony Rosholt, very stony	w w w w	76	о. к	о К	08	13	
33B	g 8	2 2	2.6	. 8	70	12	
33C	44 e	20	 2.	2.6	65	12	
38A Rosholt		28	3.5	8.4.	8 22		
38BRosholt	SS SS	26	3.0	3.2	8	13	
38C Rosholt	ø e	24.		3.0	75	13	

<sup>\*</sup> See footnote at end of table.

Table 7. -- Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land	Soybeans	Timothy-red	Bromegrass-	Corn	Corn silage	- K
		Bu	Tons	Tons	Bu	Tons	
38DRosholt	4. 0	22	2.6	. 8	70	12	
42D	g 9	24	6.	3.0	75	13	
43BAntigo		30	3.4	3.6	06	17	
43C	9 9	28	3.2	£.	80	14	
43D	9 9	26	3.0	3.2	8	13	
48ABrill	N 8	30	3.4	9.	06	T.	
63A	н	34	3.6	4.0	100	12	
63BCTStal Lake		32	3.6	ε ε	95	12	
63C	9 9	30	3.4	3.6	06	17	
63ECrystal Lake	o o	28	3.5	ε. 4.	89	14	
Totagatic	7 w 4	}					
Keweenaw	ധ 4. മ. ത ത ത	1	н Э.		45	10	
Keweenaw	4, ro ro m m m	1	J. 6		40	σ	

<sup>\*</sup> See footnote at end of table.

Table 7. -- Land Capability and Yields per Acre of Crops and Pasture -- Continued

	7	7					
Map symbol and soil name	Land capability	soybeans	rimotny-red clover hay	Bromegrass- alfalfa hay	CORD	corn silage	ke.
		Bu	Tons	Tons	Bu	Tons	
9 Е		1	1.2	1.4	35	თ	
Keweenaw	8 2						
	7.s						
74B	4. 8	!	. H 8.	:	20	10	
74C	8 9	-	. H	2.0	20	10	
74D	78		1.4	1.6	40	σı	
100B	84 83	1		1.6	40	on	
100C	ສ 9	1	1.2	L 4.	3 2	on	
100D	78	-	1.0	1.2	30	∞	
127D	8 8	24		o.e	75	13	
127E	7s 7s	;					
Magnor, very stony	8 % 8 %	28	о. С	ы 4.	8 22	14	
1578 Freeon, very stony Freeon	4 C	32	ю m	ω	95	15	
157C Freeon, very stony Freeon	8 e 8 c	30	ε 4.	9. R	06	14	
160A	2w	26	3.0	3.2	80	13	

<sup>\*</sup> See footnote at end of table.

Table 7. -- Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land	Soybeans	Timothy-red	Bromegrass-	Corn	  Corn silage	D K
		Bu	Tons	Tons	Bu	Tons	
182B	9 7	30	. E	:	06	14	
182C	e e	8	3.2	!	82	14	
192A	2 w	56	3.0	:	80	13	
193A	M 9	1		!	1	!	
215B	т М	4.2		!	75	13	
215C	4. 0	22	2.6	!	7.0	17	
215D	Φ	1	1.8	2.0	20	10	
315ARib	M 9	1		!	1	!	
337A	2 M	26	3.0	3.5	80	13	
368B	4, W 8 8	16	1 8	0.	20	10	
368C	8 9 4 8 9	16	1.6	ω 	4 5	10	
368D	7 8 9	1.44	.t	о. П	40	on	
371A	8. 8	-	2.0	;	55		
380B	ы су га	22	. 6		70	12	

<sup>\*</sup> See footnote at end of table.

Table 7. -- Land Capability and Yields per Acre of Crops and Pasture -- Continued

Map symbol and soil name	Land capability	Soybeans	Timothy-red	Bromegrass- alfalfa hay	Corn	Corn silage	Ke: b1
		Bu	Tons	Tons	Bu	Tons	
Cress	4. K	20	2 4.	. 6	65	12	
380D	9 <del>4</del> 9 9	18	2	4.	09	11	
383B	84 8	14	T.	1.6	40	თ	
383C	8 9	14	1.2	1.4	35	σ	
383D	7s	1	1.0	1.2	30	ω	
396B	4. 4. 4. 23. 23. 23		1.4	л. 1.	40	σ	
397A	4w	18	2.0	2.5	55	11	
399B Grayling	84	1	1.2	1.4	35	σ	
399C	8 9	1	1.0	1.2	30	∞	
399D	z	1	8.0	1.0	25	7	
405A	w7 w7		;		-		
406A	w/	1	:		}		
407A	W 7 W						

<sup>\*</sup> See footnote at end of table.

Table 7. -- Land Capability and Yields per Acre of Crops and Pasture -- Continued

Map symbol and soil name	Land	Soybeans	Timothy-red	Bromegrass- alfalfa hay	Corn	Corn silage	K
		Bu	Tons	Tons	Bu	Tons	
410A	7 w 7	;					
412A	7 w 7	;		!		!	
415A	× ′	;	¦ 	;	}	:	
439BGraycalm	4, 4, a a	16	 8	2.0	50	10	
439C Graycalm	8 8	4. 4.	П.	1.8	45	10	
439DGraycalm	7.8 7.8	!	п 4.	1.6	40	on	
Freeon	68 7*	30	ε 4.	٠ ٠	06	14	
442C	68 7 w	26	°.	2.	80	13	
443D	7 s 7	24 44	8	°.	75	13	
461ABowstring	7w	!	¦ 	!	;	:	
484A	w7 w7				-		
KarlsborgGrettum	6. 4. 4. 28 28 28	18	0	м	S S		

<sup>\*</sup> See footnote at end of table.

Table 7. -- Land Capability and Yields per Acre of Crops and Pasture -- Continued

Map symbol and soil name	Land	Soybeans	Timothy-red	Bromegrass- alfalfa hay	Corn	Corn silage	Ke:
		Bu	Tons	Tons	Bu	Tons	
Karlsborg	8 8 8 8 8 8	16	1.8	0.	50	10	
KarlsborgGrettum	8 7. T. 8 8 8	16	1.8	в.	4.	10	
497A	4w	20	2.4	2.6	65	12	
515A	 8	42			75	13	
521ADody		1	:		}	¦ 	
Rock outcrop	8 9 7.						
Haugen, very stony	8 O	28	α. «	ь 4.	80	14	
Haugen, very stony	ж <del>Ф</del>	26	0. E	e 8.	80	13	
543BAnigon	7 9	32	3.6	8.8	95	15	
543C2	9 9	30	3.4	3.6	06	14	
544F	8 L L	!	!		!		
555A			:		1		

<sup>\*</sup> See footnote at end of table.

Table 7. -- Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land	Soybeans	Timothy-red	Bromegrass- alfalfa hay	Corn	Corn silage	M. Ke
		Bu	Tons	Tons	Bu	Tons	
574B	8 8	-	1.6	:	45	10	
574C	æ 8	-	1.2	1. 4.	35	თ	
574E	7 s	-	1.0	1.2	30	∞	
579B Parkfalls	8 8	24	.8	3.0	75	13	
GOOA	M 9	1	!		}	!	
615BCTESS	8 8	18	2.2	2.	09	11	
615C	4 e	18	5.0	. 2	55	11	
615D	e 9	16	н ж	2.0	50	10	
623A	7w	-	¦ 	:	!	!	
624A	2w	28	3.2	e. 4.	8 2	14	
632AAftad	н	34	ж г	4.0	100	15	
632BAftad	2 6	32	9.	ω	95	15	
632C	  	30	3.4	9.	06	1.44	
Pence	7 7 0 0	1	!	<u> </u>	1	:	
648BSconsin		28	3.2	ω 4.	85	<b>1</b> 4	

<sup>\*</sup> See footnote at end of table.

Table 7. -- Land Capability and Yields per Acre of Crops and Pasture -- Continued

Map symbol and soil name	Land	Soybeans	  Timothy-red   clover hay	Bromegrass-	Corn	Corn silage	Ke:
		Bu	Tons	Tons	Bu	Tons	
Keweenaw	4. 4. 0. 0	20	4.		65	11 2	
670E	7 e	!	!		1	<u> </u>	
671BSpoonerhill, stonySpoonerhill.	ж ж ж	20	2 .	4.	65	12	
Stanberry, stony	4 4 8 8	28	3.5		85	4.1	
683ATipler	28	77 80	3.2		8	T 4	
Winterfield	4w 7w	;			!	¦ 	
724A	% & ⊗ &	!	<u> </u>		-	;	
726BSissabagama	84 8	18	2.2	4.	09	11	
733A		}		 	1	:	
771A	8. 8.	16	н 8.		20	10	
827AScoba	28	77 80	3.2	8.4.	8	T 4	
Frogcreek	8 8 % 8 8 %	26	0. E		08	13	
856BStinnett	<b>4</b> . α	78			8 22	T 4	

<sup>\*</sup> See footnote at end of table.

Table 7. -- Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land	Soybeans	Timothy-red	Bromegrass- alfalfa hay	Corn	Corn silage	K D
		Bu	Tons	Tons	Bu	Tons	
857BFrogereek	4. 8	30	. E		06	4T	
857CFrogcreek	g 9	78	3.5		85	4T	
873BStanberry	ୟ ଅ	30	e 4.		06	14 4.	
873CStanberry	g 8	78	3.2		82	14	
873DStanberry	78	1	2.6	. 8	70	12	
905A	84 83	!	2.0	2.2	55	11	
926A	ν ν		2. 2	2.4	09	11	
943DStanberryGreenwood	68 7w	-			-		
948ABillyboy	23 28	1	3.2	8. 4.	8 2	4.L	
970C	4 4 L	1	.t .e.	0.	50	10	
970E	7 7 7 8		:	:			
Tremstadt	4, 4, 0 0	18	0.	м м	5.55	11	
FremstadtCress	9 9	16	.t .s	0.0	20	10	

<sup>\*</sup> See footnote at end of table.

Table 7. -- Land Capability and Yields per Acre of Crops and Pasture -- Continued

Map symbol	Land	Soybeans	  Timothy-red	Bromegrass-	Corn	Corn silage	, K
	1	Bu	Tons	Tons	Bu	Tons	
Spoonerhill. stony	м м м м м м	18	2. 2	2.	09	11	
1653C	0 4 0 8 8 ¥	24	. 2	 	75	13	
2015	8 8	;	¦ 		1		
2050. Landfill							
3011ABarronett	, M	;	¦ 	:	1	;	
3125A	w 4	18	2.0		55	11	
3126A	4. 8	16	 8.	2.0	50	10	
3276AAu Gres	φ <b>4</b>	1	 8.	:	20	10	
3312BGlendenning, very stony Glendenning	4 C	26	3.0	3.52	8 0	13	
3336A	, w	;	:	:	-	;	
3403A Loxley Beseman	7w 7w 7w	;		;	;		
3424C Frogreek Magroc	0 4 4 8 8 8 8 8	1	!		!	!	

<sup>\*</sup> See footnote at end of table.

Table 7. -- Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol	Land	Soybeans	Timothy-red	Bromegrass-	Corn	Corn silage
	7	Bu	Tons	Tons	Bu	Tons
3446A					1	
3448B	84 83	16	1.6	1.8	45	10
3448C	89	14	1.4	1.6	40	o
3516A Slimlake	es Si	20	2.4	2.6	65	12
3629B	& &	16	H .8	2.0	50	10
M-W. Miscellaneous water						
W. Water						

<sup>\*</sup> Animal unit month: The amount of forage or feed required to feed one animal unit (one cow, one horse sheep, or five goats) for 30 days.

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## Table 8.--Prime Farmland

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name)

Map symbol	Soil name
22A	Comstock silt loam, 0 to 3 percent slopes
24A	Poskin silt loam, 0 to 3 percent slopes
27A	Scott Lake sandy loam, 0 to 3 percent slopes
28B	Haugen-Rosholt complex, 2 to 6 percent slopes, very stony
38A	Rosholt sandy loam, 0 to 2 percent slopes
38B	Rosholt sandy loam, 2 to 6 percent slopes
43B	Antigo silt loam, 1 to 6 percent slopes
48A	Brill silt loam, 0 to 3 percent slopes
63A	Crystal Lake silt loam, 0 to 2 percent slopes
63B	Crystal Lake silt loam, 2 to 6 percent slopes
156B	Magnor, very stony-Magnor complex, 0 to 4 percent slopes
157B	Freeon, very stony-Freeon complex, 2 to 6 percent slopes
160A	Oesterle sandy loam, 0 to 2 percent slopes
182B	Padus sandy loam, 0 to 6 percent slopes
192A	Worcester sandy loam, 0 to 3 percent slopes
193A	Minocqua muck, 0 to 2 percent slopes
315A	Rib silt loam, 0 to 2 percent slopes
337A	Plover fine sandy loam, 0 to 3 percent slopes
542B	Haugen, very stony-Haugen complex, 2 to 6 percent slopes
543B	Anigon silt loam, 2 to 6 percent slopes
579B	Parkfalls sandy loam, 0 to 4 percent slopes, very stony
623A	Capitola muck, 0 to 2 percent slopes, very stony
624A	Ossmer silt loam, 0 to 3 percent slopes
632A	Aftad fine sandy loam, 0 to 2 percent slopes
632B	Aftad fine sandy loam, 2 to 6 percent slopes
648B	Sconsin silt loam, 1 to 6 percent slopes
683A	Tipler sandy loam, 0 to 3 percent slopes
733A	Wozny muck, 0 to 2 percent slopes, very stony
827A	Scoba sandy loam, 0 to 3 percent slopes
856B	Stinnett silt loam, 0 to 4 percent slopes, very stony
857B	Frogcreek silt loam, 2 to 6 percent slopes, very stony
873B	Stanberry sandy loam, 1 to 6 percent slopes, very stony
948A	Billyboy silt loam, 0 to 3 percent slopes
3011A	Barronett silt loam, 0 to 2 percent slopes
3312B 3336A	Glendenning, very stony-Glendenning complex, 0 to 4 percent slopes Fenander fine sandy loam, 0 to 2 percent slopes

## Table 9.--Windbreaks and Environmental Plantings

(Absence of an entry indicates that trees generally do not grow to the given height)

Mary are M		Trees having predict	Trees having predicted 20-year average height,	eight, in feet, of
and soil name	8 >	8-15	16-25	26-35
3A. Totagatic-Bowstring- Ausable				
22A: Comstock	!	American cranberrybush, common lilac, silky	White spruce	Eastern white pine, red maple, red pine, silver maple,
		dogwood, nannyberry, northern white- cedar, redosier dogwood		white ash
24A: Poskin	 	American cranberrybush, common lilac, silky dogwood, common ninebark, nannyberry, northern white- cedar, redosier	White spruce	Eastern white pine, red maple, silver maple, white ash
27A: Scott Lake	Siberian peashrub, gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
28B: Haugen, very stony		American cranberrybush, Siberian peashrub, common lilac, Amur	Manchurian crabapple, eastern redcedar, white spruce	Eastern white pine, green ash, jack pine
Haugen	 	American cranberrybush, Siberian peashrub, common lilac, Amur maple, eastern arborvitae	Manchurian crabapple, eastern redcedar, white spruce	Eastern white pine, green ash, jack pine

Table 9. -- Windbreaks and Environmental Plantings -- Continued

Map symbol		Trees having predicted	ed 20-year average height,	sight, in feet, of
	8 >	8-15	16-25	26-35
28B: Rosholt, very stony	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
Rosholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
28C: Haugen, very stony	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
Haugen		American cranberrybush, Siberian peashrub, common lilac, Amur maple, eastern arborvitae	Manchurian crabapple, eastern redcedar, white spruce	Bastern white pine, green ash, jack pine
Rosholt, very stony	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
Rosholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
33B: Chetek	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Bastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol		Trees having predicted	ed 20-year average height,	eight, in feet, of
and soil name	8 >	8-15	16-25	26-35
33C: Chetek	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
38A: Rosholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
36B: Rosholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Bastern white pine, jack pine, red pine
38C; Rosholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Bastern redcedar, Norway spruce	Bastern white pine, jack pine, red pine
38D: Rosholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
42D: Amery	Gray dogwood	American cranberrybush, Amur maple, common lilac	Bastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol		Trees having predict	Trees having predicted 20-year average height,	eight, in feet, of
and soil name	8 >	8-15	16-25	26-35
43B: Antigo	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	Norway spruce	Eastern white pine, jack pine, red pin
43C: Antigo	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern	Norway spruce	Eastern white pine, jack pine, red pin
43D: Antigo	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white cedar, silky	Norway spruce	Eastern white pine, jack pine, red pin
48A: Brill	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
63A: Crystal Lake		American cranberrybush, Amur maple, common lilac, gray dogwood, northern white-cedar	Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol		Trees having predict	Trees having predicted 20-year average height, in feet, of	eight, in feet, of
and soil name	8>	8-15	16-25	26-35
63B: Crystal Lake	:	American	Black Hills spruce,	Eastern white pine,
		cranberrybush, Amur maple, common lilac, gray dogwood, northern white-cedar	Norway spruce, white spruce	red maple, red pine, white ash
63C: Crystal Lake	!	American cranberrybush, Amur maple, common lilac, gray dogwood, northern white-cedar	Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
63E: Crystal Lake	:	Amur maple, common lilac, gray dogwood, northern white-cedar	Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
64A. Totagatic-Winterfield				
69B: Keweenaw.				
Sayner	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Bastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
Vilas	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
69C: Keweenaw.				

Table 9. -- Windbreaks and Environmental Plantings -- Continued

		Trees having predicted	20-year average	height, in feet, of
Map symbol and soil name	8 ٧	8-15	16-25	26-35
69C: Sayner	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
Vilas	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
69E: Kewenaw.				
Sayner	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
Vilas	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
74B: Vilas	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Bastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
74C: Vilas	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
74D: Vilas	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin

Table 9. --Windbreaks and Environmental Plantings--Continued

Man symbol		Trees having predicted	ed 20-year average height,	eight, in feet, of
	8 >	8-15	16-25	26-35
100B: Menahga	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
100C: Menahga	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Bastern redcedar, Norway spruce	Bastern white pine, jack pine, red pine
100D: Menahga	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Bastern white pine, jack pine, red pine
127D: Amery	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
Rosholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
127E: Amery	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
Rosholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
156B: Magnor, very stony.				

Table 9. -- Windbreaks and Environmental Plantings -- Continued

Map symbol		Trees having predict	Trees having predicted 20-year average height,	eight, in feet, of
and soil name	8 7	8-15	16-25	26-35
156B: Magnor	<u> </u>	American cranberrybush, common lilac, nannyberry, northern white- cedar, redosier dogwood, silky	White spruce	Eastern white pine, red maple, red pine, silver maple white ash
157B: Freeon, very stony. Freeon		American cranberrybush, Amur maple, common lilac, northern white-cedar	Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
157C: Freeon, very stony.				
Freeon		American cranberrybush, Amur maple, common lilac, gray dogwood, northern white-cedar	Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
160A: Oesterle		American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Bastern white pine, red maple, red pine, silver maple
1828: Padus	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	Norway spruce	Eastern white pine, jack pine, red pin

Table 9.--Windbreaks and Environmental Plantings--Continued

Codming row		Trees having predict	Trees having predicted 20-year average height, in	eight, in feet, of
and soil name	8 >	8-15	16-25	26-35
1820:				
Padus	Manyflower	American	Norway spruce	Eastern white pine,
	cotoneaster	cranberrybush, Amur		jack pine, red pine
		maple, common		
		lilac, Siberian		
		peashrub, gray		
		dogwood, northern		
		white-cedar, silky		
		dogwood		
192A:				
1 1 1 1		1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
MOLCESCEL	 	American	wince spruce	red manle gine,
		cramery again,		red mapter attach
		Sometime trade, stray		mapte, witte asii
		aogwood, common		
		ninebark,		
		nannyberry,		
		northern white-		
	_	cedar, redosier		
		dogwood		
,				
193A.				
Minocqua				
, t				
Z15B:	Merry F Transfer	\$ 00 mm	Working to the state of the sta	To the state of th
A COLLOS	Manytrower		NOIWAY Spince	rascern wirce pine,
	cotoneaster	cranberrybush, Amur		jack pine, red pine
		maple, common		
	_	lilac, Siberian		
		peashrub, gray		
	_	dogwood, northern		
	_	white-cedar, silky		
		dogwood		
, C				
Pence	Manvflower	American	Norway sprude	Eastern white pine,
	cotoneaster	cranberrybush, Amur	4	jack pine, red pine
		maple, common		
		lilac, Siberian		
		peashrub grav		
		dogwood northern		
		white-cedar silky		
		aogwood		
		_		

Table 9. -- Windbreaks and Environmental Plantings -- Continued

Map symbol		Trees having predict	Trees having predicted 20-year average height,	sight, in feet, of
and soil name	8 >	8-15	16-25	26-35
215D: Pence	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	Norway spruce	Eastern white pine, jack pine, red pin
315A. Rib 337A.				
Plover		American cranberrybush, common lilac, nannyberry, northern white- cedar, redosier dogwood, silky	White spruce	Eastern white pine, red maple, red pine, silver maple white ash
368B: Mahtomedi	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
Cress	Siberian peashrub, common lilac	Manchurian crabapple, Siberian crabapple, eastern redcedar	Russian olive, green ash, jack pine, red pine	green Siberian elm, e, red  eastern white pine
368C: Mahtomedi	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
Cress	Siberian peashrub, common lilac	Manchurian crabapple, Siberian crabapple, eastern redcedar	Russian olive, green siberian elm, ash, jack pine, red eastern whit pine	Siberian elm, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Man grupol		Trees having predicted	ed 20-year average height,	sight, in feet, of
	8>	8-15	16-25	26-35
368D: Mahtomedi	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
Cress	Siberian peashrub, common lilac	Manchurian crabapple, Siberian crabapple, eastern redcedar	Russian olive, green Siberian elm, ash, jack pine, red  eastern whit pine	Siberian elm, eastern white pine
371A: Croswell	Siberian peashrub, manyflower cotoneaster	Amur maple, common lilac	Eastern redcedar, jack pine, red pine	Eastern white pine
380B: Cress	Siberian peashrub, common lilac	Manchurian crabapple, Siberian crabapple, eastern redcedar	Russian olive, green ash, jack pine, red pine	green Siberian elm, , red  eastern white pine
Rosholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
380C; Cress	Siberian peashrub, common lilac	Manchurian crabapple, Siberian crabapple, eastern redcedar	Russian olive, green ash, jack pine, red pine	green Siberian elm, , red  eastern white pine
Rosholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
380D: Cress	Siberian peashrub, common lilac	Manchurian crabapple, Siberian crabapple, eastern redcedar	Russian olive, green Siberian elm, ash, jack pine, red eastern whit pine	Siberian elm, eastern white pine

Table 9. -- Windbreaks and Environmental Plantings -- Continued

Map symbol		Trees having predicted	20-year average	height, in feet, of
and soil name	8>	8-15	16-25	26-35
380D: Rosholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
383B: Mahtomedi	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redoedar, Norway spruce	Eastern white pine, jack pine, red pin
383C: Mahtomedi	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
383D: Mahtomedi	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Bastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
396B: Friendship.				
Wurtsmith	Siberian peashrub, manyflower cotoneaster	Amur maple, common lilac	Eastern redcedar, jack pine, red pine	Eastern white pine
Grayling	Peking cotoneaster, Siberian peashrub, barberry, common lilac, silver buffaloberry, smooth sumac, staghorn sumac	Bastern redcedar	Jack pine, red pine, eastern white pine	

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol		Trees having predicted	ed 20-year average height,	eight, in feet, of
and soil name	8>	8-15	16-25	26-35
397A: Perchlake	Nannyberry, redosier American dogwood cranber: common dogwood	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple,
399B: Grayling	Peking cotoneaster, Siberian peashrub, barberry, common lilac, silver buffaloberry, smooth sumac, staghorn sumac	Eastern redcedar	Jack pine, red pine, eastern white pine	
399C; Grayling	Peking cotoneaster, Siberian peashrub, barberry, common lilac, silver buffaloberry, smooth sumac, staghorn sumac	Eastern redcedar	Jack pine, red pine, eastern white pine	
399D: Grayling	Peking cotoneaster, Siberian peashrub, barberry, common lilac, silver buffaloberry, smooth sumac, staghorn sumac	Bastern redcedar	Jack pine, red pine, eastern white pine	
405A. Lupton, Cathro, and Tawas				
406A. Loxley				
407A. Seelyeville and Markey 410A. Seelyeville and Cathro				

Table 9. -- Windbreaks and Environmental Plantings -- Continued

Map symbol		Trees having predict	Trees having predicted 20-year average height,	eight, in feet, of
and soil name	8 >	8-15	16-25	26-35
412A. Rifle and Tacoosh				
415A. Greenwood				
439B: Graycalm	Siberian peashrub	Amur maple, common lilac	Eastern redcedar, jack pine, red pine	Eastern white pine
Menahga	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
439C; Graycalm	Siberian peashrub	Amur maple, common lilac	Eastern redcedar, jack pine, red pine	Eastern white pine
Menahga	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Bastern white pine, jack pine, red pin
439D: Graycalm	Siberian peashrub	Amur maple, common lilac	Eastern redcedar, jack pine, red pine	Eastern white pine
Menahga	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
441C. Freeon-Cathro				
442C: Haugen	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
Greenwood.				

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol		Trees having predicted	ed 20-year average height,	ight, in feet, of-
and soil name	8 >	8-15	16-25	26-35
443D: Amery	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine red maple, red pine, white ash
Greenwood.				
461A. Bowstring				
484A. Greenwood and Beseman				
495B: Karlsborg	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce, jack pine	Eastern white pine red pine
Grettum	Siberian peashrub	Amur maple, common lilac	Eastern redcedar, jack pine, red pine	Eastern white pine
Perida	Siberian peashrub, cotoneaster, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine jack pine, red pi:
495C: Karlsborg	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Bastern redcedar, Norway spruce, jack pine	Bastern white pine red pine
Grettum	Siberian peashrub	Amur maple, common lilac	Eastern redcedar, jack pine, red pine	Eastern white pine
Perida	Siberian peashrub, cotoneaster, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine jack pine, red pi

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol		Trees having predict	Trees having predicted 20-year average height,	eight, in feet, of
	8>	8-15	16-25	26-35
495D: Karlsborg	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce, jack pine	Eastern white pine, red pine
Grettum	Siberian peashrub	Amur maple, common lilac	Eastern redcedar, jack pine, red pine	Eastern white pine
Perida	Siberian peashrub, cotoneaster, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
497A: Meenon	Mannyberry, redosier American dogwood cranber common dogwood	American cranberrybush, common lilac, silky dogwood	Bastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple
Manitowish	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky	Norway spruce	Eastern white pine, jack pine, red pin
521A. Dody				
524E: Rock outsrop.				
Frogereek.				
Metonga	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Norway spruce	Bastern white pine, jack pine, red pin

Table 9.--Windbreaks and Environmental Plantings--Continued

		Trees baying predicted	od 20-vear average height	ight in feet of
Map symbol		D	7	
and soil name	8	8-15	16-25	26-35
542B: Haugen, very stony	  Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
Haugen	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
542C: Haugen, very stony	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
Haugen	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
543B, 543C2. Anigon				
544F: Menahga	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Bastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
Mahtomedi	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
555A. Fordum				
574B: Sayner	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine

Table 9. --Windbreaks and Environmental Plantings--Continued

Map symbol		Trees having predicted	ced 20-year average height,	ight, in feet, of
and soil name	8 >	8-15	16-25	26-35
574C; Sayner	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
574E: Sayner	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Bastern redcedar, Norway spruce	Bastern white pine, jack pine, red pin
579B. Parkfalls				
600A. Haplosaprists and Psammaquents				
615B: Cress	Siberian peashrub, common lilac	Manchurian crabapple, Siberian crabapple, eastern redcedar	Russian olive, green ash, jack pine, red pine	green Siberian elm, e, red  eastern white pine
615C: Cress	Siberian peashrub, common lilac	Manchurian crabapple, Siberian crabapple, eastern redcedar	Russian olive, green ash, jack pine, red pine	green Siberian elm, a, red  eastern white pine
615D: Cress	Siberian peashrub, common lilac	Manchurian crabapple, Siberian crabapple, eastern redcedar	Russian olive, green ash, jack pine, red pine	green Siberian elm, e, red eastern white pine
623A. Capitola				

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol		Trees having predicted 20-year	ed 20-year average height,	sight, in feet, of
and soil name	8 >	8-15	16-25	26-35
624A: Ossmer		American cranberrybush, common lilac, silky dogwood, nannyberry, northern white- cedar, redosier dogwood	White spruce	Eastern white pine, red maple, red pine, silver maple, white ash
632A: Aftad	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
632B: Aftad		American cranberrybush, Amur maple, common lilac, gray dogwood, northern white-cedar	Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
632C: Aftad	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
633F: Pence	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	Norway spruce	Bastern white pine, jack pine, red pine

Table 9. --Windbreaks and Environmental Plantings--Continued

Mary Cody		Trees having predict	Trees having predicted 20-year average height,	eight, in feet, of
and soil name	8	8-15	16-25	26-35
633F: Padus	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky	Norway spruce	Bastern white pine, jack pine, red pin
648B: Sconsin	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	Norway spruce	Bastern white pine, jack pine, red pin
670C: Keweenaw.				
Pence	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	Norway spruce	Eastern white pine, jack pine, red pin
670E: Keweenaw.				
Pence	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	Norway spruce	Bastern white pine, jack pine, red pin
671B. Spoonerhill, stony- Spoonerhill				

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol		Trees having predicted 20-year	ed 20-year average height,	sight, in feet, of
and soil name	8>	8-15	16-25	26-35
680B: Stanberry, stony.				
Pence, stony	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky	Norway spruce	Eastern white pine, jack pine, red pine
683A: Tipler	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky	Norway spruce	Bastern white pine, jack pine, red pine
706A. Winterfield-Totagatic				
724A. Rib-Rock outcrop				
726B: Sissabagama	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
733A. Wozny				
771A: Lenroot	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Bastern redcedar, Norway spruce	Bastern white pine, jack pine, red pine

Table 9. --Windbreaks and Environmental Plantings--Continued

Local many		Trees having predict	Trees having predicted 20-year average height, in feet, of-	sight, in feet, of
and soil name	8 >	8-15	16-25	26-35
827A: Scoba	Siberian peashrub, gray dogwood, manyflower cotoneaster	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
853C: Frogcreek	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
Stinnett	Nannyberry, redosier American   dogwood   cranber.   common	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple
Wozny.				
856B: Stinnett	Nannyberry, redosier dogwood	redosier American   cranberrybush,   common lilac, silky   dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, pine, white ash
857B: Frogcreek	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
857C: Frogcreek	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash
873B, 873C, 873D. Stanberry				

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol		Trees having predicted 20-year	ed 20-year average height, in	eight, in feet, of
and soil name	8 >	8-15	16-25	26-35
905A: Cublake	Peking cotoneaster, Siberian peashrub, buffaloberry, common lilac, smooth sumac, staghorn sumac	Eastern redcedar	Austrian pine, jack pine, red pine, eastern white pine	Manchurian crabapple
926A: Flink	Sargent crabapple, silky dogwood	American cranberrybush, common lilac, nannyberry	Bastern arborvitae, white spruce	Manchurian crabapple, red pine, eastern white
943D. Stanberry-Greenwood				
948A: Billyboy	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redoedar, Norway spruce	Bastern white pine, jack pine, red pine
970C: Keweenaw.				
Pence	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Bastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
Greenwood.				
970E: Keweenaw.				
Pence	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Bastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine
Greenwood.				

Table 9. -- Windbreaks and Environmental Plantings -- Continued

Map symbol		Trees having predict	Trees having predicted 20-year average height,	ight, in feet, of
and soil name	8 >	8-15	16-25	26-35
1070C: Fremstadt	Peking cotoneaster, Siberian peashrub	Common lilac, Amur   maple, eastern   arborvitae	Manchurian crabapple, white spruce, Norway	Eastern white pine, jack pine, red pin
CressC	Siberian peashrub, common lilac	Manchurian crabapple, Siberian crabapple, eastern redcedar	Russian olive, green siberian elm, ash, jack pine, red eastern whit pine	Siberian elm, eastern white pine
1070D: Fremstadt	Peking cotoneaster, Siberian peashrub	Common lilac, Amur maple, eastern arborvitae	Manchurian crabapple, white spruce, Norway	Bastern white pine, jack pine, red pin
Cress	Siberian peashrub, common lilac	Manchurian crabapple, Siberian crabapple, eastern redcedar	Russian olive, ash, jack pine pine	green Siberian elm, e, red  eastern white pine
1080B: Spoonerhill. Spoonerhill, stony.				
Cress-	Siberian peashrub, common lilac	Manchurian crabapple, Siberian crabapple, eastern redcedar	Russian olive, green Siberian ash, jack pine, red eastern pine	Siberian elm, eastern white pine
1653C. Stanberry-Parkfalls- Wozny				
2015. Pits				
2050. Landfill				
3011A. Barronett				

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol		Trees having predict	Trees having predicted 20-year average height,	eight, in feet, of
and soil name	8 >	8-15	16-25	26-35
3125A: Meehan	Nannyberry, redosier American dogwood cranber common dogwood	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple
3126A: Wurtsmith	Siberian peashrub, manyflower cotoneaster	Amur maple, common lilac	Eastern redcedar, jack pine, red pine	Bastern white pine
3276A: Au Gres	Common ninebark	American cranberrybush, nannyberry	Amur maple, white spruce	Manchurian crabapple, Norway spruce, jack pine, eastern white pine
3312B: Glendenning, very stony	Redosier dogwood, silky dogwood	American cranberrybush, common lilac	Eastern arborvitae, white spruce	Norway spruce, eastern white pine green ash, red pine, silver maple
Glendenning	Redosier dogwood, silky dogwood	American cranberrybush, common lilac	Eastern arborvitae, white spruce	Norway spruce, eastern white pine green ash, red pine, silver maple white ash
3336A. Fenander 3403A. Loxley, Beseman, and Dawson				
3424C: Frogcreek	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Bastern white pine, red maple, red pine, white ash

Table 9. -- Windbreaks and Environmental Plantings -- Continued

Lodania		Trees having predict	Trees having predicted 20-year average height,	eight, in feet, of
and soil name	8 >	8-15	16-25	26-35
3424C: Magroc		American cranberrybush, common lilac	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple
Stinnett	Nannyberry, redosier American dogwood cranber: common dogwood	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Bastern white pine, red maple, red pine, silver maple white ash
Rock outcrop.				
3446A. Newson				
3448B: Grettum	Peking cotoneaster, Siberian peashrub, buffaloberry, common lilac,	Bastern redcedar	Jack pine, red pine, eastern white pine	ŀ
	buffaloberry, smooth sumac, staghorn sumac			
3448C: Grettum	Peking cotoneaster, Siberian peashrub, buffaloberry,	Eastern redcedar	Jack pine, red pine, eastern white pine	
	common lilac, silver buffaloberry, smooth sumac, staghorn sumac			
3516A: Slimlake	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin
3629B; Perida	Siberian peashrub, cotoneaster, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Bastern redcedar, Norway spruce	Eastern white pine, jack pine, red pin

Table 9.--Windbreaks and Environmental Plantings--Continued

		Trees having predict	Trees having predicted 20-year average height, in feet, of	eight, in feet, of
Map symbol				
and soil name	<8	8-15	16-25	26-35
M-W.				
Miscellaneous water				
Μ.				
Water				

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Table 10.--Conservation Tree/Shrub Suitability Groups

(Absence of an entry indicates that a conservation tree/shrub suitability group is not assigned)

Map symbol   and	Conservation tree/shrub
soil name	suitability group
3A:   Totagatic	10
Bowstring	10
Ausable	10
22A:   Comstock	10
24A:     Poskin	10
27A:   Scott Lake	6GA
28B:   Haugen, very stony	2A
   Haugen	2A
Rosholt, very stony	6GA
Rosholt	6GA
28C: Haugen, very stony	2A
Haugen	2A
Rosholt, very stony	6GA
Rosholt	6GA
33B:   Chetek	6GA
33C:   Chetek	6GA
38A:   Rosholt	6GA
38B: Rosholt	6GA
38C:   Rosholt	6GA
38D:   Rosholt	6GA
42D:   Amery	4A
43B:   Antigo	6GA
43C:   Antigo	6GA

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and	   Conservation   tree/shrub
soil name	suitability group
	<u> </u>
43D: Antigo	 
48A: Brill	
63A: Crystal Lake	   2A 
63B: Crystal Lake	   2A 
63C: Crystal Lake	 
63E: Crystal Lake	 
64A: Totagatic	10
Winterfield	10
69B: Keweenaw	 
Sayner	7A
Vilas	7A 
69C: Keweenaw	   <b>4A</b>
Sayner	   7A
Vilas	   7A 
69E: Keweenaw	     4A
Sayner	7A
Vilas	   7A
74B: Vilas	     7A
74C: Vilas	 
74D: Vilas	 
100B: Menahga	 
100C: Menahga	 
100D: Menahga	     7A

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol	Conservation
and soil name	tree/shrub
SOII Hame	suitability group
127D:	
Amery	4A
-	
Rosholt	6GA
127E:	4-
Amery	4A
Rosholt	   6GA
156B:	
Magnor, very stony	10
Magnor	10
157B:	
Freeon, very stony	2A
Freeon	2A
157C:	
Freeon, very stony	2A
Freeon	   2A
110001	
160A:	
Oesterle	10
182B: Padus	   6GA
Padus	OGA
182C:	
Padus	6GA
192A:	
Worcester	10
193A:	
Minocqua	10
_	
215B:	
Pence	6GA
215C:	 
Pence	   6GA
	· <del></del>
215D:	
Pence	6GA
2153.	
315A: Rib	   10
112	
337A:	
Plover	10
368B:	73
Mahtomedi	7A
Cress	   6GA
368C:	
Mahtomedi	7A
G	[
Cress	6 <b>GA</b>
	I

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol	Conservation
and	tree/shrub
soil name	suitability group
368D:	
Mahtomedi	7A
_	
Cress	6GA
371A:	 
Croswell	10
Clobwcll	1
380B:	
Cress	6GA
	i 
Rosholt	6GA
380C:	
Cress	6GA
Rosholt	6GA
2000	
380D: Cress	   6GA
Cless	OGA
Rosholt	   6GA
110211020	
383B:	
Mahtomedi	7A
383C:	
Mahtomedi	7A
383D:	
Mahtomedi	7A
396B:	 
Friendship	1A
	<del></del>
Wurtsmith	2A
	i İ
Grayling	7A
397A:	
Perchlake	10
399B:	   <b>7A</b>
Grayling	/A
399C:	 
Grayling	7A
79	
399D:	
Grayling	7A
405A:	
Lupton	10
Cathro	10
	10
Tawas	10
406A:	 
Loxley	   10
	<del>  1</del> 0
	ı

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol   and	Conservation tree/shrub
soil name	suitability group
407A:     Seelyeville	10
Markey	10
410A:	10
Cathro	10
412A:	10
Tacoosh	10
415A:   Greenwood	10
439B:	7A
Menahga	7A
439C:     Graycalm	7A
Menahga	7A
439D:	7 <b>A</b>
Menahga	7A
441C:	2A
Cathro	10
442C:   	2A
Greenwood	10
443D:   Amery	4A
Greenwood	10
461A:   Bowstring	10
484A:	10
Beseman	10
495B:     Karlsborg	2 <b>A</b>
Grettum	1A
Perida	1A

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and	   Conservation   tree/shrub
soil name	suitability group
495C: Karlsborg	   2A 
Grettum	   1A 
Perida	1A
495D: Karlsborg	   2A 
Grettum	1A
Perida	1A 
497A: Meenon	   10 
515A: Manitowish	   2A 
521A: Dody	   10 
524E: Rock outcrop.	 
Frogcreek	2A
Metonga	4A
542B: Haugen, very stony	   2A 
Haugen	2A
542C: Haugen, very stony	   2A 
Haugen	2A
543B: Anigon	   6GA 
543C2: Anigon	   6GA 
544F: Menahga	7A
Mahtomedi	7A
555A: Fordum	10
574B: Sayner	7 <b>A</b>
574C: Sayner	7A
574E: Sayner	7A
	•

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and	   Conservation   tree/shrub
soil name	suitability group
579B: Parkfalls	 
600A: Haplosaprists	   10 
Psammaquents	10
615B: Cress	   6GA 
615C: Cress	 
615D: Cress	 
623A: Capitola	10
624A: Ossmer	10
632A: Aftad	 
632B: Aftad	 
632C: Aftad	2A
633F: Pence	 
Padus	6GA
648B: Sconsin	   2A 
670C: Keweenaw	   4A 
Pence	6GA
670E: Keweenaw	4A
Pence	6GA
671B: Spoonerhill, stony	2A
Spoonerhill	2 <b>A</b>
680B: Stanberry, stony	 
Pence, stony	6GA
683A: Tipler	   2A 

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol	Conservation
and	tree/shrub
soil name	suitability group
706A: Winterfield	10
Totagatic	10
724A: Rib	10
Rock outcrop.	
726B: Sissabagama	2A
733A: Wozny	10
771A: Lenroot	2 <b>A</b>
827A: Scoba	2 <b>A</b>
853C: Frogcreek	2A
Stinnett	10
Wozny	10
856B: Stinnett	10
857B: Frogcreek	2 <b>A</b>
857C: Frogcreek	2A
873B: Stanberry	2 <b>A</b>
873C: Stanberry	2 <b>A</b>
873D: Stanberry	2A
905A: Cublake	2A
926A: Flink	10
943D: Stanberry	2A
Greenwood	10
948A: Billyboy	2A

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol	Conservation tree/shrub
and soil name	suitability group
970C:	
Keweenaw	4A
Pence	(3)
Pence	6 <b>GA</b>
Greenwood	10
970E: Keweenaw	   <b>4A</b>
Reweenaw	<del>*A</del> 
Pence	6GA
Greenwood	10
1070C:	
Fremstadt	4A
Cress	6GA
1070D:	
Fremstadt	4A
Cress	6GA
1080B:	
Spoonerhill	2A
Spoonerhill, stony	2A
Cress	   6GA
1653C:	
Stanberry	2A
Parkfalls	10
Wozny	10
2015.	 
Pits	
2050.	
Landfill	 
3011A:	
Barronett	10
2125	
3125A: Meehan	   10
Meenan	
3126A:	
Wurtsmith	2A
3276A:	 
Au Gres	10
3312B:	
Glendenning, very stony	   10
Glendenning	10

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol	Conservation	
and	tree/shrub	
soil name	suitability group	
3336A:		
Fenander	10	
3403A:		
Loxley	10	
HOXIEY	10	
Beseman	10	
Dawson	10	
Dawson	10	
3424C:		
Frogcreek	2A	
   Magroc	10	
į		
Stinnett	10	
Rock outcrop.		
3446A:		
Newson	10	
Newson	10	
3448B:		
Grettum	1A	
3448C:		
Grettum	1A	
3516A:		
Slimlake	6GA	
3629B:		
Perida	2A	
M-W.		
Miscellaneous water		
W.		
Water		

Table 11.--Forest Land Harvest Equipment Considerations

(See text for a description of the considerations listed in this table)

Map symbol	Forest land harvest equipment
and	considerations
soil name	
27.	
3A: Totagatic	Flooding
100494010	Wetness
	Susceptible to rutting and wheel slippage
	Poor traction (loose sandy material)
Bowstring	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
Ausable	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
	Poor traction (loose sandy material)
22A:	
Comstock	Wetness
	Susceptible to rutting and wheel slippage
24A:	
Poskin	Wetness
	Susceptible to rutting and wheel slippage
27A:	
Scott Lake	No major considerations
28B:	
Haugen, very stony	Wetness
Haugen	Wetness
Rosholt, very stony	No major considerations
Rosholt	No major considerations
ROBILOTO	No major constactations
28C:	
Haugen, very stony	Wetness
Haugen	Wetness
Dogholt war stone	No major gongidorations
Rosholt, very stony	No major considerations
Rosholt	No major considerations
33B:	
Chetek	Susceptible to rutting and wheel slippage
227	
33C:	Susceptible to rutting and wheel slippage
Checek	susceptible to futting and wheel slippage
38A:	
Rosholt	No major considerations
38B:	
Rosholt	No major considerations
38C:	
Rosholt	No major considerations
38D:	
Rosholt	Slope

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol and soil name	Forest land harvest equipment considerations
42D: Amery	Slope
43B: Antigo	No major considerations
43C: Antigo	No major considerations
43D: Antigo	Slope
48A: Brill	Wetness Susceptible to rutting and wheel slippage
63A: Crystal Lake	Wetness Susceptible to rutting and wheel slippage
63B: Crystal Lake	Wetness Susceptible to rutting and wheel slippage
63C: Crystal Lake	Wetness Susceptible to rutting and wheel slippage
63E: Crystal Lake	Slope Wetness Susceptible to rutting and wheel slippage
64A: Totagatic	Flooding Wetness Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
Winterfield	Flooding Wetness Poor traction (loose sandy material)
69B: Keweenaw	Poor traction (loose sandy material)
Sayner	Poor traction (loose sandy material)
Vilas	Poor traction (loose sandy material)
69C: Keweenaw	Poor traction (loose sandy material)
Sayner	Poor traction (loose sandy material)
Vilas	Poor traction (loose sandy material)
69E: Keweenaw	Slope Poor traction (loose sandy material)
Sayner	Slope Poor traction (loose sandy material)

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and soil name	considerations
soli name	
69E: Vilas	Slope Poor traction (loose sandy material)
74B: Vilas	Poor traction (loose sandy material)
74C: Vilas	Poor traction (loose sandy material)
74D: Vilas	Slope   Poor traction (loose sandy material)
100B: Menahga	Poor traction (loose sandy material)
100C: Menahga	Poor traction (loose sandy material)
100D: Menahga	   Slope   Poor traction (loose sandy material)
127D: Amery	Slope
Rosholt	Slope
127E: Amery	Slope
Rosholt	Slope
156B: Magnor, very stony	Wetness
Magnor	Wetness
157B: Freeon, very stony	Wetness
Freeon	Wetness
157C: Freeon, very stony	Wetness
Freeon	Wetness
160A: Oesterle	Wetness
182B: Padus	No major considerations
182C: Padus	No major considerations
192A: Worcester	Wetness
193A: Minocqua	Wetness Susceptible to rutting and wheel slippage

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and	considerations
soil name	
215B:	
Pence	No major considerations
215C:	
Pence	No major considerations
215D:	
Pence	Slope
315A:	
Rib	Wetness
	Susceptible to rutting and wheel slippage
337A:	
Plover	Wetness
368B:	Poor traction (long gardy material)
Mantomedi	Poor traction (loose sandy material)
Cress	No major considerations
2.22	
Mahtomedi	Poor traction (loose sandy material)
Mantomeal	root craction (roote bandy material)
Cress	No major considerations
368D:	
Mahtomedi	Slope
	Poor traction (loose sandy material)
Cress	Slope
371A:	
Croswell	Poor traction (loose sandy material)
3000	
380B: Cress	No major considerations
i	
Rosholt	No major considerations
380C:	
Cress	No major considerations
Rosholt	No major considerations
380D:	
Cress	Slope
	-1
Rosholt	Slope
383B:	
Mahtomedi	Poor traction (loose sandy material)
383C:	
	Poor traction (loose sandy material)
İ	-
383D:	Clone
Mahtomedi	Slope Poor traction (loose sandy material)
i	
396B:	
Friendship	Poor traction (loose sandy material)
Wurtsmith	Poor traction (loose sandy material)
İ	· ·

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and	considerations
soil name	
396B:	
Grayling	Poor traction (loose sandy material)
397A:	
Perchlake	Wetness
	Poor traction (loose sandy material)
	•
399B:	
Grayling	Poor traction (loose sandy material)
-	-
399C:	
Grayling	Poor traction (loose sandy material)
399D:	
Grayling	Slope
	Poor traction (loose sandy material)
405A:	
Lupton	Wetness
	Susceptible to rutting and wheel slippage
Cathro	Wetness
	Susceptible to rutting and wheel slippage
Tawas	Wetness
	Susceptible to rutting and wheel slippage
406A:	
Loxley	Wetness
	Susceptible to rutting and wheel slippage
407A:	
Seelyeville	Wetness
	Susceptible to rutting and wheel slippage
Markey	Wetness
	Susceptible to rutting and wheel slippage
410A:	
Seelyeville	Wetness
	Susceptible to rutting and wheel slippage
_	
Cathro	Wetness
	Susceptible to rutting and wheel slippage
4400	
412A:	<u> </u>
Rifle	Wetness
	Susceptible to rutting and wheel slippage
_	
Tacoosh	
	Susceptible to rutting and wheel slippage
4153.	
415A:	
Greenwood	
	Susceptible to rutting and wheel slippage
439B:	
	Poor traction (loose sandy material)
GrayCarm	Poor traction (loose sandy material)
Menahga	Poor traction (loose sandy material)
menanga	Poor traction (loose sandy material)
439C:	
	Poor traction (loose sandy material)
GrayCarm	Poor traction (loose sandy material)
Menahga	Poor traction (loose sandy material)
menanya	Poor traction (loose sandy material)

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and	considerations
soil name	
439D:	
Graycalm	Slope
	Poor traction (loose sandy material)
Menahga	Slope
	Poor traction (loose sandy material)
441C:	
Freeon	Wetness
Cathro	Wetness
	Susceptible to rutting and wheel slippage
442C:	
Haugen	Wetness
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
443D:	
Amery	Slope
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
461A:	
Bowstring	_
	Wetness
	Susceptible to rutting and wheel slippage
4045	
484A:	Water and
Greenwood	
	Susceptible to rutting and wheel slippage
Beseman	Wetness
2000	Susceptible to rutting and wheel slippage
i	basespersie to ratering and miser sirppage
495B:	
Karlsborg	Wetness
Ī	Poor traction (loose sandy material)
İ	-
Grettum	Poor traction (loose sandy material)
Perida	Wetness
	Poor traction (loose sandy material)
495C:	
Karlsborg	
	Poor traction (loose sandy material)
Grettum	Poor traction (loose sandy material)
Perida	
	Poor traction (loose sandy material)
40FD -	
495D:	gl and
Karlsborg	_
	Wetness
	Poor traction (loose sandy material)
Grettum	Slope
Grecomi	Poor traction (loose sandy material)
	1001 claction (100se sandy material)
· ·	

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and	considerations
soil name	
495D:	
Perida	Slope
	Wetness
	Poor traction (loose sandy material)
497A:	
Meenon	Wetness
	Poor traction (loose sandy material)
515A:	
Manitowish	No major considerations
521A:	
Dody	Wetness
	Susceptible to rutting and wheel slippage
	Poor traction (loose sandy material)
524E:	
Rock outcrop.	
Frogcreek	Wetness
_	Areas of rock outcrop
Metonga	<del>-</del>
	Areas of rock outcrop
5405	
542B:	Wahaasa
Haugen, very stony	Wetness
Haugen	Wetness
naugon	l leading to the second
542C:	
Haugen, very stony	Wetness
Haugen	Wetness
E42D -	
543B:	Susceptible to rutting and wheel slippage
Anigon	busceptible to lutting and wheel slippage
543C2:	
Anigon	Susceptible to rutting and wheel slippage
544F:	
Menahga	<del>-</del>
	Poor traction (loose sandy material)
Mahtomedi	Slone
Mancomedi	Poor traction (loose sandy material)
	State of (1995) band, material)
555A:	
Fordum	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
574D ·	
574B:	Poor traction (loose conductorial)
baynet	Poor traction (loose sandy material)
574C:	
	Poor traction (loose sandy material)
_	
574E:	
Sayner	<del>-</del>
	Poor traction (loose sandy material)

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and soil name	considerations
BOII Name	
579B:	Wetness
Parkfalls	wethess
600A:	   Onsite investigation required
napiosapiists	Onsite investigation required
Psammaquents	Onsite investigation required
615B:	
Cress	No major considerations
615C:	
Cress	No major considerations
615D:	
Cress	Slope
623A:	
Capitola	Wetness   Susceptible to rutting and wheel slippage
624A: Ossmer	Wetness
OSSMET	Nethess
632A: Aftad	Wetness
Altau	Nethess
632B: Aftad	Wotpogg
Altad	wethess
632C: Aftad	Wotness
Altau	Nethess
633F: Pence	   Slope
rence	310pe
Padus	Slope
648B:	
Sconsin	Wetness
670C:	
Keweenaw	No major considerations
Pence	   No major considerations
670E:	
Keweenaw	   Slope
Dongo	Clone
Pence	Slope
671B:	Water and
Spoonerhill, stony	wethess
Spoonerhill	Wetness
680B:	 
Stanberry, stony	Wetness
Pence, stony	   No major considerations
_	
683A: Tipler	No major considerations
-	

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and soil name	considerations
BOII Hame	
706A: Winterfield	   Flooding   Wetness   Poor traction (loose sandy material)
Totagatic	   Flooding   Wetness   Poor traction (loose sandy material)
724A: Rib	   Wetness   Areas of rock outcrop   Susceptible to rutting and wheel slippage
Rock outcrop.	
726B: Sissabagama	   Wetness   Poor traction (loose sandy material)
733A: Wozny	   Wetness   Susceptible to rutting and wheel slippage 
771A: Lenroot	   Poor traction (loose sandy material) 
827A: Scoba	   No major considerations
853C: Frogcreek	   Wetness
Stinnett	Wetness
Wozny	   Wetness   Susceptible to rutting and wheel slippage
856B: Stinnett	   Wetness
857B: Frogcreek	   Wetness
857C: Frogcreek	   Wetness
873B: Stanberry	   Wetness
873C: Stanberry	   Wetness
873D: Stanberry	   Slope   Wetness
905A: Cublake	   Wetness   Poor traction (loose sandy material)
926A: Flink	   Wetness   Poor traction (loose sandy material) 

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and	considerations
soil name	
943D:	
Stanberry	Slope
	Wetness
į	
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
948A:	
Billyboy	No major considerations
970C:	
Keweenaw	No major considerations
Pence	No major gongidorations
r ence	No major considerations
Greenwood	Wetness
İ	Susceptible to rutting and wheel slippage
970E:     Keweenaw	Clone
Veweeliam	510pe
Pence	Slope
I	
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
1070C:	
Fremstadt	Poor traction (loose sandy material)
I	
Cress	No major considerations
1070D:	
Fremstadt	Slope
į	Poor traction (loose sandy material)
_	
Cress	Slope
1080B:	
Spoonerhill	Wetness
Spoonerhill, stony	Wetness
Cress	No major considerations
1653C:	
Stanberry	Wetness
  Parkfalls	Wetness
raikiaiis	Nethess
Wozny	Wetness
I	Susceptible to rutting and wheel slippage
2015.	
Pits	
2050.	
Landfill	
3011A:	
Barronett	Wetness
j	Susceptible to rutting and wheel slippage
į	
3125A:	Waterana
Meehan	Wetness Poor traction (loose sandy material)
	1001 craction (100se sandy material)

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and soil name	considerations
3126A: Wurtsmith	Poor traction (loose sandy material)
3276A: Au Gres	Wetness Poor traction (loose sandy material)
3312B: Glendenning, very stony	Wetness
Glendenning	Wetness
3336A: Fenander	Wetness
3403A: Loxley	Wetness Susceptible to rutting and wheel slippage
Beseman	Wetness Susceptible to rutting and wheel slippage
Dawson	Wetness Susceptible to rutting and wheel slippage
3424C: Frogcreek	Wetness
Magroc	Wetness
Stinnett	Wetness
Rock outcrop.	
3446A: Newson	Wetness Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
3448B:	Poor traction (loose sandy material)
3448C: Grettum	Poor traction (loose sandy material)
3516A: Slimlake	No major considerations
3629B: Perida	Wetness Poor traction (loose sandy material)
M-W. Miscellaneous water	
W. Water	

Table 12.--Forest Haul Road Considerations

(See text for a description of the considerations listed in this table)

Map symbol	Forest haul road
and	considerations
soil name	
22	
3A:	
Totagatic	_
	Wetness
	Low bearing strength
Bowstring	Flooding
	Wetness
	Low bearing strength
	l now bearing screngen
Ausable	Flooding
	Wetness
	Low bearing strength
22A:	
Comstock	Wetness
	Low bearing strength
	Dow Douring Derongen
0.45	
24A:	<u></u>
Poskin	Wetness
	Low bearing strength
27A:	
Scott Lake	No major considerations
	<b>,</b>
28B:	
	***
Haugen, very stony	Wetness
Haugen	Wetness
Rosholt, very stony	No major considerations
i	
Rosholt	No major considerations
28C:	
	01
Haugen, very stony	_
	Wetness
Haugen	Slope
	Wetness
i	
Rosholt, very stony	Slone
ROBHOIC, Very Scony	biope
Rosholt	Slope
33B:	
Chetek	No major considerations
33C:	
Chetek	Slope
	===#= 
203.	
38A:	
Rosholt	No major considerations
38B:	
Rosholt	No major considerations
i	
38C:	
Rosholt	Slope
VODITOT C	nrohe
38D:	
Rosholt	Slope

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	001121401401011
SOII Halle	
42D:	
Amery	Slope
-	_
43B:	
Antigo	No major considerations
43C:	
Antigo	Slope
	21020
40-	
43D:	
Antigo	Slope
48A:	
Brill	Wetness
	Low bearing strength
	now bearing screngen
63A:	
Crystal Lake	Wetness
İ	Low bearing strength
i	
63B:	
	Watersan
Crystal Lake	Wetness
	Low bearing strength
63C:	
Crystal Lake	Slope
crystar name	-
	Wetness
	Low bearing strength
63E:	
Crystal Lake	Slope
- i	Wetness
	Low bearing strength
	now bearing screngen
64A:	
Totagatic	Flooding
	Wetness
İ	Low bearing strength
i	5 5
Wintersial A	m1 4:
Winterfield	Flooding
	Wetness
69B:	
Keweenaw	No major considerations
i	-
Sayner	No major considerations
palmer	10 mg of considerations
Vilas	No major considerations
69C:	
Keweenaw	Slope
i	-
Saunor	Clone
Sayner	probe
Vilas	Slope
69E:	
Keweenaw	Slope
	• *
G	G1
Sayner	Slope
Vilas	Slope
İ	
'	

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
74B:	
Vilas	No major considerations
74C:	 
Vilas	   Slope
VIIas	Slope
74D:	 
Vilas	Slope
100-	
100B:	
Menahga	No major considerations
100C:	 
Menahga	Slope
100D:	
Menahga	Slope
127D:	
Amery	Slope
Rosholt	Slope
127E:	
Amery	Slope
Rosholt	Slope
156B:	
Magnor, very stony	Wetness
Magnor	Wetness
J.	
157B:	
Freeon, very stony	Wetness
• • •	
Freeon	Wetness
157C:	
Freeon, very stony	Slope
1100011, 1017 200117	Wetness
Freeon	   Slope
riecon	Wetness
	Wethess
160A:	I 
Oesterle	Wetness
OEDUGITE	Wetness
1000.	 
182B:	No major gongid
Padus	NO major considerations
1000	
182C:	
Padus	Slope
1000	
192A:	
Worcester	Wetness
193A:	
Minocqua	Wetness
	Low bearing strength
215B:	
Pence	No major considerations

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
215C:	
Pence	Slope
215D:	
Pence	Slope
315A:	
Rib	Wetness
	Low bearing strength
337A:	
Plover	Wetness
368B:	
Mahtomedi	No major considerations
_	
Cress	No major considerations
2609	
368C:	Clana
Mahtomedi	Slope
G	<b>61</b> ·····
Cress	Slope
368D:	
Mahtomedi	Clone
Mancomedi	STOPE
Cress	Slope
C1688	biope
371A:	
Croswell	No major considerations
0100011	iio iiiajoi ooiibiaoiaoiib
380B:	
Cress	No major considerations
İ	
Rosholt	No major considerations
380C:	
Cress	Slope
Rosholt	Slope
380D:	
Cress	Slope
Rosholt	Slope
383B:	
Mahtomedi	No major considerations
2020.	
383C:	<b>61</b>
Mahtomedi	Slope
383D:	
Mahtomedi	Clone
Man comedi	Slope
396B:	
Friendship	No major considerations
Wurtsmith	No major considerations
Grayling	No major considerations
· · <u>/</u>	
397A:	
Perchlake	Wetness
i	

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
399B:	
Grayling	No major considerations
399C:	Clone
Grayling	Slope
399D:	
Grayling	Slope
405A:	
Lupton	Wetness
	Low bearing strength
Cathro	Wetness
cacinito	Low bearing strength
Tawas	Wetness Low bearing strength
	now bearing screngen
406A:	
Loxley	
	Low bearing strength
407A:	
Seelyeville	
	Low bearing strength
Markey	Wetness
	Low bearing strength
410A:	
Seelyeville	Wetness
	Low bearing strength
Cathro	Wetness
	Low bearing strength
412A: Rifle	Wetness
	Low bearing strength
_	
Tacoosh	Wetness Low bearing strength
415A:	
Greenwood	Wetness   Low bearing strength
	low bearing belongen
439B:	
Graycalm	No major considerations
Menahga	No major considerations
439C: Graycalm	Slope
Menahga	Slope
439D:	
Graycalm	Slope
Menahga	Slope

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
441C:	
Freeon	01
rieeon	Slope
	Wetness
Cathro	
	Low bearing strength
442C:	
Haugen	Slope
	Wetness
Greenwood	Wetness
	Low bearing strength
443D:	
Amery	Slope
Greenwood	Wetness
	Low bearing strength
461A:	
Bowstring	Flooding
3	Wetness
	Low bearing strength
	zon bouring borongon
484A:	
Greenwood	Wetness
0100111000	Low bearing strength
	now bearing screngen
Beseman	Wetness
Deseman	Low bearing strength
	now bearing screngen
495B:	
Karlsborg	Wetness
Railbboig	Mechess
Grettum	No major considerations
GI e C Cum	No major considerations
Perida	Wetness
Perida	wechess
495C:	
	G1
Karlsborg	-
	Wetness
	-2
Grettum	Slope
Perida	
	Wetness
4055	
495D:	
Karlsborg	-
	Wetness
Grettum	Slope
	_
Perida	
	Wetness
497A:	
Meenon	Wetness
515A:	
Manitowish	No major considerations

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
521A:	
Dody	
-	Low bearing strength
524E:	
Rock outcrop.	
Frogcreek	   Slope
1109010011	Wetness
	Areas of rock outcrop
Metonga	_
	Areas of rock outcrop
542B:	
Haugen, very stony	Wetness
Haugen	Wetness
542C:	
Haugen, very stony	Slope
	Wetness
Haugen	:
	Wetness
543B:	
Anigon	Low bearing strength
543C2:	
Anigon	Slope   Low bearing strength
544F:	
Menahga	Slope
Mahtomedi	   Slope
	51000
555A:	
Fordum	
	Wetness   Low bearing strength
	now bearing strength
574B:	
Sayner	No major considerations
5846	
574C: Sayner	Slone
bayner	Blope
574E:	
Sayner	Slope
F70D.	
579B: Parkfalls	   Wetness
	··  
600A:	
Haplosaprists	Onsite investigation required
P	
rsammaquents	Onsite investigation required
615B:	
Cress	No major considerations

Table 12.--Forest Haul Road Considerations--Continued

Map symbol and	Forest haul road considerations
soil name	Considerations
615C:	
Cress	Slope
615D:	
Cress	Slope
623A: Capitola	Wetness
Capitola	Low bearing strength
624A:	Watersan
Ossmer	Wetness
632A:	
Aftad	Wetness
632B:	
Aftad	   Wetness
632C:	 
Aftad	Slope   Wetness
633F:	
Pence	Slope
Padus	   Slope
	-
648B:	 
Sconsin	Wetness
670C:	
Keweenaw	Slope
Pence	   Slope
rence	Blope
670E:	
Keweenaw	Slope
Pence	   Slope
2 5110 5	510p0
671B:	
Spoonerhill, stony	Wetness
Spoonerhill	   Wetness
-	
680B:	Waterage
Stanberry, stony	wethess
Pence, stony	No major considerations
683A: Tipler	No major considerations
11b1e1	No major considerations
706A:	
Winterfield	
	Wetness
Totagatic	Flooding
	Wetness

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
724A:	
Rib	Wetness
	Areas of rock outcrop
	Low bearing strength
Rock outcrop.	
•	
726B:	
Sissabagama	Wetness
733A:	
Wozny	Wetness
•	Low bearing strength
771A:	
Lenroot	No major considerations
Zeni oo c	
827A:	
Scoba	No major considerations
50054	No major complactations
853C:	
Frogcreek	Slone
riogcieek	Wetness
	Wechess
Stinnett	Wetness
Scrimecc	Wechess
Wozny	Wotpogg
WOZIIY	Low bearing strength
	now bearing screngen
856B:	
Stinnett	Wetness
beimece	Wethers
857B:	
Frogcreek	Wetness
857C:	
Frogcreek	Slope
3	Wetness
873B:	
Stanberry	Wetness
-	
873C:	
Stanberry	Slope
-	Wetness
873D:	
Stanberry	Slope
-	Wetness
905A:	
Cublake	Wetness
926A:	
Flink	Wetness
943D:	
Stanberry	Slope
-	Wetness
Greenwood	Wetness
	Low bearing strength

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
948A:	
Billyboy	No major considerations
970C:	
Keweenaw	Slope
Pence	Slope
Greenwood	Wetness
	Low bearing strength
970E:	
Keweenaw	Slope
Denge	Clana
Pence	Slope
Greenwood	Wetness
01001111000	Low bearing strength
	2011 2011 211 2010 119 11
1070C:	
Fremstadt	Slope
Cress	Slope
1070D:	
Fremstadt	Slope
Cress	Slope
1080B:	
Spoonerhill	Wetness
Creenembill sterv	Wetness
Spoonerhill, stony	Wechess
Cress	No major considerations
	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
1653C:	
Stanberry	Slope
_	Wetness
Parkfalls	Wetness
Wozny	Wetness
	Low bearing strength
0015	
2015. Pits	
FILS	
2050.	
Landfill	
3011A:	
Barronett	Wetness
j	Low bearing strength
3125A:	
Meehan	Wetness
3126A:	
Wurtsmith	No major considerations
0075	
3276A:	Waterana
Au Gres	Wetness

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
3312B:	
Glendenning, very stony	Wetness
,	
Glendenning	Wetness
3336A: Fenander	Webness
renander	wechess
3403A:	
Loxley	Wetness
	Low bearing strength
Beseman	Wetness
Deseman	Low bearing strength
	Low Bearing Berengen
Dawson	Wetness
	Low bearing strength
24049	
3424C: Frogcreek	Slone
Tiogorock	Wetness
Magroc	Wetness
Stinnett	Wetness
Rock outcrop.	
-	
3446A:	
Newson	
	Low bearing strength
3448B:	
Grettum	No major considerations
3448C: Grettum	Clana
GIECCUM	Slope
3516A:	
Slimlake	No major considerations
26000	
3629B: Perida	Wetness
r G1 1ua	necness
M-W.	
Miscellaneous water	
W. Water	
nacci	
	<u> </u>

Table 13.--Forest Log Landing Considerations

(See text for a description of the considerations listed in this table)

Map symbol	Forest log landing
and	considerations
soil name	
3A:	
Totagatic	Flooding
10tagatit	-
	Wetness
	Susceptible to rutting and wheel slippage
Bowstring	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
Ausable	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
	babeeperbre to racting and wheer brippage
223	
22A:	 
Comstock	Wetness
	Susceptible to rutting and wheel slippage
24A:	
Poskin	Wetness
	Susceptible to rutting and wheel slippage
27A:	
Scott Lake	No major considerations
28B:	
Haugen, very stony	Wetness
Haugen	Wetness
J	
Rosholt, very stony	No major considerations
nosmozo, vozy soczy	
Rosholt	No major gangidorations
ROSHOIC	NO major considerations
00.7	
28C:	
Haugen, very stony	Slope
	Wetness
Haugen	Slope
_	Wetness
Rosholt, very stony	Slope
MODBIOIC, VELY SCORY	biopo
Darkala	
Rosholt	Slope
33B:	
Chetek	No major considerations
33C:	
Chetek	Slope
38A:	
Rosholt	No major considerations
38B:	
Rosholt	No major considerations
38C:	
Rosholt	Slope
	·

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and soil name	considerations
soli name	
38D:	
Rosholt	Slope
42D:	gl -m-
Amery	Slope
43B:	
Antigo	No major considerations
40-7	
43C: Antigo	Slope
1	51050
43D:	
Antigo	Slope
48A:	
Brill	Wetness
İ	Susceptible to rutting and wheel slippage
63A: Crystal Lake	Wetness
Crystal Lake	Susceptible to rutting and wheel slippage
j	
63B:	
Crystal Lake	
	Susceptible to rutting and wheel slippage
63C:	
Crystal Lake	Slope
	Wetness
	Susceptible to rutting and wheel slippage
63E:	
Crystal Lake	Slope
	Wetness
	Susceptible to rutting and wheel slippage
64A:	
Totagatic	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
Winterfield	Flooding
	Wetness
69B:	
Keweenaw	No major considerations
i	-
Sayner	No major considerations
Vilas	No major considerations
***************************************	no major compressations
69C:	
Keweenaw	Slope
Sayner	Slope
Day MCL	51090
Vilas	Slope
69E:	Slone
Keweenaw	Slope
Sayner	Slope
Vilas	Slope
l	

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	
	<u> </u>
E4D	
74B:	
Vilas	No major considerations
74C:	
Vilas	Slope
74D:	
Vilas	Slope
	22020
100B:	 
	No major gangidorations
Menahga	No major considerations
100C:	
Menahga	Slope
100D:	
Menahga	Slope
127D:	
Amery	Slope
2	
Rosholt	   Slope
ROSHOIC	blobe
105-	
127E:	
Amery	Slope
Rosholt	Slope
156B:	
Magnor, very stony	Wetness
Magnor	Wetness
magnor	NCCITCED
157B:	 
	Matanaga
Freeon, very stony	wetness
_	
Freeon	Wetness
157C:	
Freeon, very stony	Slope
	Wetness
Freeon	Slope
	Wetness
160A:	[ 
	   Wetness
Oesterle	MECHESS
182B:	
Padus	No major considerations
182C:	
Padus	Slope
192A:	
Worcester	Wetness
193A:	 
	Wetness
Minocqua	
	Susceptible to rutting and wheel slippage
215B:	
Pence	No major considerations
	-

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and soil name	considerations
SOII Hame	
215C: Pence	Slope
215D: Pence	Slope
315A: Rib	Wetness   Susceptible to rutting and wheel slippage
337A: Plover	Wetness
368B: Mahtomedi	No major considerations
Cress	No major considerations
368C: Mahtomedi	Slope
Cress	Slope
368D: Mahtomedi	Slope
Cress	Slope
371A: Croswell	No major considerations
380B: Cress	No major considerations
Rosholt	No major considerations
380C: Cress	Slope
Rosholt	Slope
380D: Cress	Slope
Rosholt	Slope
383B: Mahtomedi	No major considerations
383C: Mahtomedi	Slope
383D: Mahtomedi	Slope
396B: Friendship	No major considerations
Wurtsmith	No major considerations
Grayling	No major considerations
397A: Perchlake	Wetness

Table 13.--Forest Log Landing Considerations--Continued

Map symbol and soil name	Forest log landing considerations
399B: Grayling	No major considerations
399C: Grayling	Slope
399D: Grayling	Slope
405A:	
Lupton	Wetness Susceptible to rutting and wheel slippage
Cathro	Wetness Susceptible to rutting and wheel slippage
Tawas	Wetness Susceptible to rutting and wheel slippage
406A: Loxley	Wetness Susceptible to rutting and wheel slippage
407A: Seelyeville	Wetness Susceptible to rutting and wheel slippage
Markey	Wetness Susceptible to rutting and wheel slippage
410A: Seelyeville	Wetness Susceptible to rutting and wheel slippage
Cathro	Wetness Susceptible to rutting and wheel slippage
412A: Rifle	Wetness Susceptible to rutting and wheel slippage
Tacoosh	Wetness Susceptible to rutting and wheel slippage
415A: Greenwood	Wetness Susceptible to rutting and wheel slippage
439B: Graycalm	No major considerations
Menahga	No major considerations
439C: Graycalm	Slope
Menahga	Slope
439D: Graycalm	Slope
Menahga	Slope

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	
441C:	
Freeon	Slope
İ	Wetness
Cathro	Wetness
	Susceptible to rutting and wheel slippage
442C:	
Haugen	Slope
Ī	Wetness
_	
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
443D:	
Amery	Slope
_	
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
461A:	
Bowstring	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
484A:	
Greenwood	Wetness
İ	Susceptible to rutting and wheel slippage
_	
Beseman	Wetness Susceptible to rutting and wheel slippage
	susceptible to futting and wheel slippage
495B:	
Karlsborg	Wetness
Grettum	No major considerations
GIECCUM	No major considerations
Perida	Wetness
495C:	gl -m-
Karlsborg	Wetness
Grettum	Slope
Perida	Slope Wetness
	no careas
495D:	
Karlsborg	Slope
	Wetness
Grettum	Slope
Perida	Slope
	Wetness
4973	
497A: Meenon	Wetness
515A:	
Manitowish	No major considerations

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	CONDITIONS
SOII Halle	
521A:	
Dody	Wetness
-	Susceptible to rutting and wheel slippage
	babooperbie to ratering and wheel brippage
524E:	
Rock outcrop.	
Frogcreek	Slone
11090100	Wetness
	Areas of rock outcrop
Metonga	Slope
	Areas of rock outcrop
542B:	
Haugen, very stony	Wetness
Haugen	Wetness
-	
542C:	
	<b>63</b>
Haugen, very stony	_
	Wetness
Haugen	Slope
	Wetness
	Wechess
543B:	
Anigon	Susceptible to rutting and wheel slippage
543C2:	
	Clana
Anigon	_
	Susceptible to rutting and wheel slippage
544F:	
Menahga	Slope
J	•
Mahtomedi	glone
Mancomedi	Slope
555A:	
Fordum	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
	Susceptible to lutting and wheel slippage
574B:	
Sayner	No major considerations
i	
574C:	
Sayner	Clone
Sayner	Slope
574E:	
Sayner	Slope
İ	
579B:	
Parkfalls	Wetness
ratkialis	Wetness
600A:	
Haplosaprists	Onsite investigation required
Daamma au on t-a	Ongito invogtigation required
rsammaquents	Onsite investigation required
615B:	
Cress	No major considerations
i	

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	
615C:	
Cress	Slope
01000	510p0
61ED.	
615D:	
Cress	Slope
623A:	
Capitola	Wetness
	Susceptible to rutting and wheel slippage
624A:	
Ossmer	Wetness
i	
632A:	
Aftad	Wetness
112 044	Nethebb
(22D)	
632B:	***
Aftad	Wetness
632C:	
Aftad	Slope
	Wetness
633F:	
Pence	Slope
Padus	Slone
I dddb	510pc
648B:	
	***
Sconsin	Wetness
670C:	
Keweenaw	Slope
Pence	Slope
670E:	
Keweenaw	Slope
i	
Pence	Slope
671B:	
	Wotnogg
Spoonerhill, stony	NECLICAS
	<u></u>
Spoonerhill	wetness
680B:	
Stanberry, stony	Wetness
Pence, stony	No major considerations
İ	
683A:	
Tipler	No major considerations
	,
706A:	
Winterfield	   Flooding
MIUCELITEIG	Flooding
	Wetness
Totagatic	_
	Wetness

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	
724A:	
Rib	Wetness
	Areas of rock outcrop
	Susceptible to rutting and wheel slippage
Rock outcrop.	
726B:	
Sissabagama	Wetness
733A:	
Wozny	Wetness
	Susceptible to rutting and wheel slippage
	babeeperbre to racerng and wheer brippage
7713.	 
771A:	 
Lenroot	No major considerations
827A:	
Scoba	No major considerations
853C:	
Frogcreek	Slope
3	Wetness
Ctinnott	Wetness
Stinnett	wechess
Wozny	
	Susceptible to rutting and wheel slippage
856B:	
Stinnett	Wetness
857B:	
Frogcreek	Wetness
1109010011	
857C:	 
	[
Frogcreek	:
	Wetness
873B:	
Stanberry	Wetness
873C:	
Stanberry	Slope
-	Wetness
873D:	I 
Stanberry	:
	Wetness
905A:	
Cublake	Wetness
926A:	
Flink	Wetness
943D:	[ 
Stanberry	   Slone
pramerry	:
	Wetness
Greenwood	·
	Susceptible to rutting and wheel slippage

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	
948A:	
Billyboy	No major considerations
970C:	
Keweenaw	Slope
Pence	   Slope
rence	Stope
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
970E:	
Keweenaw	Slope
Pence	Slope
Greenwood	Wetness
Gleenwood	Susceptible to rutting and wheel slippage
	baboopoible to lateling and wheel blippage
1070C:	
Fremstadt	Slope
Cress	Slope
1070D:	
Fremstadt	Slope
Cress	Slope
Clebs	Blope
1080B:	
Spoonerhill	Wetness
Spoonerhill, stony	Wetness
_	
Cress	No major considerations
1653C:	
Stanberry	Slope
-	Wetness
Parkfalls	Wetness
Wozny	Wetness
	Susceptible to rutting and wheel slippage
2015.	
Pits	
-	
2050.	
Landfill	
3011A:	Water and
Barronett	
	Susceptible to rutting and wheel slippage
3125A:	
Meehan	Wetness
3126A:	
Wurtsmith	No major considerations
3276A:	
Au Gres	Wetness

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	
3312B:	
Glendenning, very stony	Wetness
Glendenning	Wetness
3336A: Fenander	Wetness
3403A: Loxley	Wetness Susceptible to rutting and wheel slippage
Beseman	Wetness Susceptible to rutting and wheel slippage
Dawson	Wetness Susceptible to rutting and wheel slippage
3424C:	
Frogcreek	Slope Wetness
Magroc	Wetness
Stinnett	Wetness
Rock outcrop.	
3446A: Newson	Wetness Susceptible to rutting and wheel slippage
3448B: Grettum	No major considerations
3448C: Grettum	Slope
3516A: Slimlake	No major considerations
3629B: Perida	Wetness
M-W. Miscellaneous water	
W. Water	

Table 14.--Forest Land Site Preparation and Planting Considerations
(See text for a description of the considerations listed in this table)

Map symbol	Forest land site preparation and planting
and soil name	considerations
3A: Totagatic	Flooding Wetness
Bowstring	Flooding Wetness
Ausable	Flooding Wetness
22A: Comstock	   Wetness   Potential poor tilth and compaction
24A: Poskin	Wetness Cobbly surface
27A: Scott Lake	Cobbly surface
28B: Haugen, very stony	Wetness Surface stones Cobbly surface
Haugen	Wetness Cobbly surface
Rosholt, very stony	Surface stones Cobbly surface
Rosholt	Cobbly surface
28C: Haugen, very stony	Wetness Surface stones Cobbly surface Water erosion
Haugen	Wetness Cobbly surface Water erosion
Rosholt, very stony	Surface stones Cobbly surface Water erosion
Rosholt	Cobbly surface Water erosion
33B: Chetek	Cobbly surface
33C: Chetek	Cobbly surface Water erosion
38A: Rosholt	Cobbly surface

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
38B: Rosholt	Cobbly surface
38C: Rosholt	Cobbly surface Water erosion
38D: Rosholt	Slope Cobbly surface Water erosion
42D: Amery	Slope Surface stones Cobbly surface Water erosion
43B: Antigo	Cobbly surface
43C: Antigo	Cobbly surface Water erosion
43D: Antigo	Slope Cobbly surface Water erosion
48A: Brill	Wetness Cobbly surface
63A: Crystal Lake	Wetness Potential poor tilth and compaction
63B: Crystal Lake	Wetness Potential poor tilth and compaction
63C: Crystal Lake	Wetness Water erosion Potential poor tilth and compaction
63E: Crystal Lake	Slope Wetness Water erosion Potential poor tilth and compaction
64A: Totagatic	Flooding Wetness
Winterfield	Flooding Wetness

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
69B: Keweenaw	Surface stones
Sayner	Surface stones Cobbly surface
Vilas	Surface stones
69C:	
Keweenaw	Surface stones Water erosion
Sayner	Surface stones Cobbly surface
	Water erosion
Vilas	Surface stones Water erosion
69E:	
Keweenaw	Slope
İ	Surface stones
	Water erosion
Sayner	Slope
12,000	Surface stones
	Cobbly surface
	Water erosion
Vilas	Slope
İ	Surface stones
	Water erosion
74B:	No major considerations
74C: Vilas	Water erosion
74D:	
Vilas	-
	Water erosion
100B:	
Menahga	No major considerations
100C:	
Menahga	Water erosion
100D:	
Menahga	Slope
	Water erosion
1270.	
127D: Amery	   Slope
-	Surface stones
!	Cobbly surface
	Water erosion
Rosholt	Slope
İ	Surface stones
	Cobbly surface
	Water erosion

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
315A: Rib	Wetness Cobbly surface Potential poor tilth and compaction
337A: Plover	Wetness
368B: Mahtomedi	Cobbly surface
Cress	Cobbly surface
368C: Mahtomedi	Cobbly surface Water erosion
Cress	Cobbly surface Water erosion
368D: Mahtomedi	Slope Cobbly surface Water erosion
Cress	Slope Cobbly surface Water erosion
371A: Croswell	No major considerations
380B: Cress	Cobbly surface
Rosholt	Cobbly surface
380C: Cress	Cobbly surface Water erosion
Rosholt	Cobbly surface Water erosion
380D: Cress	Slope Cobbly surface Water erosion
Rosholt	Slope Cobbly surface Water erosion
383B: Mahtomedi	Cobbly surface
383C: Mahtomedi	Cobbly surface Water erosion
383D: Mahtomedi	Slope Cobbly surface Water erosion

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and	Forest land site preparation and planting considerations
soil name	
396B:	
Friendship	No major considerations
Wurtsmith	No major considerations
Grayling	No major considerations
397A: Perchlake	Wetness
399B: Grayling	No major considerations
399C: Grayling	Water erosion
399D: Grayling	Slope Water erosion
405A:	Wetness
Cathro	Wetness
Tawas	Wetness
406A:	Wetness
407A: Seelyeville	Wetness
Markey	Wetness
410A: Seelyeville	Wetness
Cathro	Wetness
412A: Rifle	Wetness
Tacoosh	Wetness
415A: Greenwood	Wetness
439B: Graycalm	Cobbly surface
Menahga	No major considerations
439C: Graycalm	Cobbly surface Water erosion
Menahga	Water erosion
439D: Graycalm	Slope Cobbly surface Water erosion

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and	Forest land site preparation and planting considerations
soil name	Considerations
İ	
439D:	<b>61</b>
Menahga	Slope Water erosion
i	water erosion
141C:	
Freeon	Wetness
	Surface stones
	Cobbly surface Water erosion
j	
Cathro	Wetness
440.0	
442C:   Haugen	Wetness
ladgen	Surface stones
į	Cobbly surface
I	Water erosion
<b>3</b>	Water
Greenwood	Wetness
443D:	
Amery	Slope
	Surface stones
Į.	Cobbly surface
	Water erosion
Greenwood	Wetness
461A:	
Bowstring	_
	Wetness
484A:	
Greenwood	Wetness
Beseman	Wetness
495B:	
Karlsborg	Wetness
Grettum	No major considerations
   Perida	Wetness
495C:	
Karlsborg	
	Water erosion
Grettum	Water erosion
Perida	Wetness
	Water erosion
495D:	
Karlsborg	Slope
-	Wetness
j	Water erosion
G. a. b. b. a. a.	<b>61</b>
Grettum	_
	Water erosion
Perida	Slope
	Wetness

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol	Forest land site preparation and planting
and	considerations
soil name	
4053	
497A:	Wataana
Meenon	Wetness
515A:	 
Manitowish	Cobbly surface
521A:	
Dody	Wetness
524E:	
Rock outcrop.	
Frogcreek	
	Surface stones   Areas of rock outcrop
	Cobbly surface
	Water erosion
Metonga	Slope
	Surface stones
	Areas of rock outcrop
	Cobbly surface
	Water erosion
5.405	
542B:	Wetness
Haugen, very stony	Surface stones
	Cobbly surface
Haugen	Wetness
	Cobbly surface
542C:	
Haugen, very stony	
	Surface stones
	Cobbly surface   Water erosion
	water erosion 
Haugen	Wetness
3	Cobbly surface
	Water erosion
543B:	
Anigon	Cobbly surface
E4202.	
543C2: Anigon	Cobbly surface
wir 2011	Cobbiy surface   Water erosion
544F:	
Menahga	Slope
	Water erosion
Mahtomedi	. –
	Cobbly surface
	Water erosion
5557.	 
555A: Fordum	   Flooding
1 01 duii	Wetness
	Cobbly surface
	Potential poor tilth and compaction

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
574B: Sayner	Cobbly surface
574C: Sayner	Cobbly surface Water erosion
574E: Sayner	Slope Cobbly surface Water erosion
579B: Parkfalls	Wetness Surface stones
600A: Haplosaprists	Onsite investigation required
Psammaquents	Onsite investigation required
615B: Cress	Cobbly surface
615C: Cress	Cobbly surface Water erosion
615D: Cress	Slope Cobbly surface Water erosion
623A: Capitola	Wetness Surface stones
624A: Ossmer	Wetness Cobbly surface
632A: Aftad	Wetness
632B: Aftad	Wetness
632C: Aftad	Wetness Water erosion
633F: Pence	Slope Cobbly surface Water erosion
Padus	Slope Cobbly surface Water erosion
648B: Sconsin	Wetness Cobbly surface

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
670C: Keweenaw	Surface stones Cobbly surface Water erosion
Pence	Surface stones Cobbly surface Water erosion
670E: Keweenaw	Slope Surface stones Cobbly surface Water erosion
Pence	Slope Surface stones Cobbly surface Water erosion
671B: Spoonerhill, stony	Wetness Surface stones Cobbly surface
Spoonerhill	Wetness Cobbly surface
680B: Stanberry, stony	Wetness Surface stones
Pence, stony	Surface stones Cobbly surface
683A: Tipler	Cobbly surface
706A: Winterfield	Flooding Wetness
Totagatic	Flooding Wetness
724A: Rib	Wetness Areas of rock outcrop Cobbly surface Potential poor tilth and compaction
Rock outcrop.	
726B: Sissabagama	Wetness
733A: Wozny	Wetness Surface stones
771A: Lenroot	No major considerations

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and	Forest land site preparation and planting considerations
soil name	considerations
827A:	
Scoba	Cobbly surface
853C:	
Frogcreek	
	Surface stones
	Cobbly surface Water erosion
i	
Stinnett	
	Surface stones  Cobbly surface
	comply surface
Wozny	Wetness
	Surface stones
856B:	
Stinnett	Wetness
İ	Surface stones
	Cobbly surface
857B:	
	Wetness
i	Surface stones
	Cobbly surface
857C:	
Frogcreek	Wetness
į	Surface stones
	Cobbly surface
	Water erosion
873B:	
Stanberry	
	Surface stones
873C:	
Stanberry	Wetness
	Surface stones
	Water erosion
873D:	
Stanberry	Slope
	Wetness
	Surface stones Water erosion
j	
905A:	
Cublake	Wetness
926A:	
Flink	Wetness
0427	
943D: Stanberry	Slope
bounderly	Wetness
i	Surface stones
ļ	Water erosion
Greenwood	Wetness
31331W004	- neoneda
948A:	
Billyboy	Cobbly surface

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
970C: Keweenaw	Surface stones Cobbly surface Water erosion
Pence	Surface stones Cobbly surface Water erosion
Greenwood	Wetness
970E: Keweenaw	Slope Surface stones Cobbly surface Water erosion
Pence	Slope Surface stones Water erosion
Greenwood	Wetness
1070C:   Fremstadt	Surface stones Cobbly surface Water erosion
Cress	Cobbly surface Water erosion
1070D:     Fremstadt	Slope Surface stones Cobbly surface Water erosion
Cress	Slope Cobbly surface Water erosion
1080B: Spoonerhill	Wetness Cobbly surface
Spoonerhill, stony	Wetness Surface stones Cobbly surface
   Cress	Cobbly surface
1653C:   Stanberry	Wetness Surface stones Water erosion
Parkfalls	Wetness Surface stones
Wozny	Wetness Surface stones
2015. Pits	

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol	Forest land site preparation and planting
and	considerations
soil name	
2050.	
Landfill	
20113	
3011A:	Watara
Barronett	
	Potential poor tilth and compaction
3125A:	
Meehan	Wetness
Meenan	Hechess
3126A:	
Wurtsmith	No major considerations
3276A:	
Au Gres	Wetness
3312B:	
Glendenning, very stony	Wetness
	Surface stones
	Cobbly surface
Glendenning	Wetness
	Cobbly surface
3336A:	
Fenander	Wetness
2422	
3403A:	
Loxley	wetness
Beseman	Wotnogg
besellan	Wechess
Dawson	Wetness
2450	
3424C:	
Frogcreek	Wetness
	Surface stones
	Cobbly surface
	Water erosion
Magroc	
	Surface stones
	Cobbly surface
and we state	Water and
Stinnett	
	Surface stones
	Cobbly surface
Rock outcrop.	
ROCK Outerop.	
3446A:	
Newson	Wetness
3448B:	
Grettum	No major considerations
3448C:	
Grettum	Water erosion
3516A:	
Slimlake	Cobbly surface
25007	
3629B:	Waterana
Perida	wethess

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Forest land site preparation and planting   considerations
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Table 15.--Forest Habitat Types

(Absence of an entry indicates that no forest habitat type is applicable. See text for descriptions of the forest habitat types listed in this table)

Map symbol and map unit name	   Dominant   habitat	   Codominant   habitat	Common   habitat types	   Region
•	type	types		<u> </u>
3A Totagatic-Bowstring-Ausable complex, 0 to 2 percent slopes, frequently flooded	-   		 	       
22AComstock silt loam, 0 to 3 percent slopes	  ASaI   		ACaCi	1
24A Poskin silt loam, 0 to 3 percent slopes	  ASaI   		ACaCi 	
27AScott Lake sandy loam, 0 to 3 percent slopes				1
28B Haugen-Rosholt complex, 2 to 6 percent slopes, very stony	 	AVDe, AAt		1     
28C Haugen-Rosholt complex, 6 to 12 percent slopes, very stony		AVDe, AAt		1
33BChetek sandy loam, 1 to 6 percent slopes	  AVDe   			1
33CChetek sandy loam, 6 to 12 percent slopes	  AVDe   			1
Rosholt sandy loam, 0 to 2 percent slopes	     	AVDe, AAt		     
Rosholt sandy loam, 2 to 6 percent slopes	 	AVDe, AAt		1
Rosholt sandy loam, 6 to 12 percent slopes		AVDe, AAt		1
38D Rosholt sandy loam, 12 to 20 percent slopes		AVDe, AAt		1
Amery sandy loam, 12 to 25 percent slopes, very stony		AVDe, AAt		
43B Antigo silt loam, 1 to 6 percent slopes	  ACaCi 			1

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	   Dominant   habitat   type 	Codominant   habitat   types	Common   habitat types 	   Region     
43CAntigo silt loam, 6 to 15 percent slopes	  ACaCi   			   1 
Antigo silt loam, 15 to 30 percent slopes	  ACaCi   	     		   1   
48ABrill silt loam, 0 to 3 percent slopes	  ACaCi   	     		   1   
63ACrystal Lake silt loam, 0 to 2 percent slopes	  ACaCi   	     		   1 
63B Crystal Lake silt loam, 2 to 6 percent slopes	  ACaCi   	 		   1 
63C Crystal Lake silt loam, 6 to 12 percent slopes	  ACaCi   	 		   1 
63E Crystal Lake silt loam, 20 to 35 percent slopes	  ACaCi   	 		   1 
64A Totagatic-Winterfield complex, 0 to 2 percent slopes, frequently flooded	       	  Lfp, ArVRp   		   1   
69B Keweenaw-Sayner-Vilas complex, 2 to 6 percent slopes, stony	       	  PArVAm, AVDe   		   1   
69C Keweenaw-Sayner-Vilas complex, 6 to 15 percent slopes, stony	 	  PArVAm, AVDe   	 	   1   
69E Keweenaw-Sayner-Vilas complex, 15 to 45 percent slopes, stony	 	  PArVAm, AVDe     		   1   
74B Vilas loamy sand, 0 to 6 percent slopes	  PArVAa   	 		   3   
74CVilas loamy sand, 6 to 15 percent slopes	  PArVAa   	     		   3   
74DVilas loamy sand, 15 to 30 percent slopes	  PArVAa     	       		   3   
100B Menahga sand, 0 to 6 percent slopes	PQGCe   	     	  PArVAm   	1   

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	Dominant   habitat   type	Codominant   habitat   types	Common   habitat types 	   Region   
100C Menahga sand, 6 to 12 percent slopes	  PQGCe 	 	PArVAm 	1
100D Menahga sand, 12 to 30 percent slopes	  PQGCe 	 	PArVAm 	1
127DAmery-Rosholt complex, 12 to 20 percent slopes, very stony	į	AVDe, AAt    - 		1
127E Amery-Rosholt complex, 20 to 45 percent slopes, very stony	į	AVDe, AAt     		1
156B Magnor, very stony-Magnor complex, 0 to 4 percent slopes	 	  ASaI, AAt     		1
157B Freeon, very stony-Freeon complex, 2 to 6 percent slopes	   <b>AA</b> t     	     	ACaCi   	1
157C Freeon, very stony-Freeon complex, 6 to 12 percent slopes	  AAt     	     	ACaCi   	1
160A Oesterle sandy loam, 0 to 2 percent slopes		 	AVDe	1
182B Padus sandy loam, 0 to 6 percent slopes	  ATM   			3
182C Padus sandy loam, 6 to 15 percent slopes	  ATM   			3
192A	TMC   			3
193A Minocqua muck, 0 to 2 percent slopes	  Lwmin   			
215B Pence sandy loam, 0 to 6 percent slopes	AVVb			3
215C Pence sandy loam, 6 to 15 percent slopes	  AVVb   	     	     	3

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	   Dominant   habitat   type 	Codominant   habitat   types	Common habitat types	   Region   
215D Pence sandy loam, 15 to 30 percent slopes	     <b>A</b> VVb 			3
315A Rib silt loam, 0 to 2 percent slopes	  Lwmin   			
337A Plover fine sandy loam, 0 to 3 percent slopes	  ArVRp   			1
368B Mahtomedi-Cress complex, 2 to 6 percent slopes	     	PArVAm, AVDe	 	1
368C Mahtomedi-Cress complex, 6 to 12 percent slopes	 	PArVAm, AVDe	 	1
368D Mahtomedi-Cress complex, 12 to 25 percent slopes	!	  PArVAm, AVDe 	 	   1 
371A	1		 	3
380B	     	AVDe, AAt	 	1
380C Cress-Rosholt complex, 6 to 12 percent slopes	!	AVDe, AAt	 	1
380D Cress-Rosholt complex, 12 to 25 percent slopes	     	AVDe, AAt	 	1
383B Mahtomedi loamy sand, 0 to 6 percent slopes	   PArVAm   		  PQGCe   	1
383C Mahtomedi loamy sand, 6 to 12 percent slopes	  PArVAm   		  PQGCe 	1
383D Mahtomedi loamy sand, 12 to 30 percent slopes	!		  PQGCe   	1
396B Friendship-Wurtsmith- Grayling complex, 0 to 6 percent slopes	  PQGCe   		 	1
397A Perchlake loamy fine sand, 0 to 2 percent slopes	  ArVRp     		  PArVAm   	   1   

Table 15.--Forest Habitat Types--Continued

			- <u>.</u>	
Map symbol and map unit name	Dominant   habitat   type	Codominant   habitat   types	Common   habitat types 	   Region   
399BGrayling sand, 0 to 6 percent slopes	  PQGCe   		 	1
399CGrayling sand, 6 to 12 percent slopes	   PQGCe   	     	 	1
399DGrayling sand, 12 to 30 percent slopes	PQGCe     	     		1
405A Lupton, Cathro, and Tawas soils, 0 to 1 percent slopes	  Lnorg     			
406A Loxley mucky peat, 0 to 1 percent slopes	  Lnorg   	     		
407A Seelyeville and Markey soils, 0 to 1 percent slopes	  Lnorg     			
410A	  Lnorg     			
412ARifle and Tacoosh soils, 0 to 1 percent slopes	  Lnorg   	     		
415AGreenwood mucky peat, 0 to 1 percent slopes	  Lnorg   	   		
439BGraycalm-Menahga complex, 0 to 6 percent slopes		   	PQGCe	1
439CGraycalm-Menahga complex, 6 to 12 percent slopes	•	 	PQGCe	1
439DGraycalm-Menahga complex, 12 to 30 percent slopes	  PArVAm   	 	PQGCe	1
441C Freeon, very stony-Cathro complex, 0 to 15 percent slopes	 	  AAt, AVDe     	  Lnorg   	1
442C Haugen, very stony- Greenwood complex, 0 to 15 percent slopes	į	  AVDe, AAt     	  Laorg     	1

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	   Dominant   habitat   type 	Codominant   habitat   types	   Common   habitat types   	   Region     
Amery, very stony-Greenwood complex, 0 to 35 percent slopes	!	AVDe, AAt	  Laorg   	   1   
461A Bowstring muck, 0 to 1 percent slopes, frequently flooded	į			
484AGreenwood and Beseman soils, 0 to 1 percent slopes	  Laorg     			       
495B Karlsborg-Grettum-Perida complex, 1 to 6 percent slopes	   PArVAm     			   1   
495C Karlsborg-Grettum-Perida complex, 6 to 12 percent slopes	   PArVAm     			   1   
495D Karlsborg-Grettum-Perida complex, 12 to 30 percent slopes	   PArVAm     			   1   
497A Meenon loamy sand, 0 to 3 percent slopes	     	ArVRp, PArVam		   1 
515A Manitowish sandy loam, 0 to 3 percent slopes			 	   3   
521A Dody muck, 0 to 2 percent slopes	  Lwmin     		   	     
524E Rock outcrop-Frogcreek- Metonga complex, 2 to 45 percent slopes, very stony	 			3   
542B	       	AAt, AVDe		   1   
542C	       	AAt, AVDe		   1   
543B Anigon silt loam, 2 to 6 percent slopes	  ACaCi     		 	   1   

Table 15.--Forest Habitat Types--Continued

	<u> </u>	<u> </u>	!	<u> </u>
Map symbol and map unit name	Dominant   habitat   type 	Codominant   habitat   types	Common   habitat types 	Region   
543C2	  ACaCi   			1
544F Menahga and Mahtomedi soils, 30 to 45 percent slopes	   PArVAm       	       	  PQGCe   	1
555A Fordum silt loam, 0 to 2 percent slopes, frequently flooded	į	 		
574BSayner loamy sand, 0 to 6 percent slopes	  PArVAa   			3
574CSayner loamy sand, 6 to 15 percent slopes	1			3
574ESayner loamy sand, 15 to 45 percent slopes		     	 	3
579B Parkfalls sandy loam, 0 to 4 percent slopes, very stony	   TMC   		ATM	3
600A. Haplosaprists and Psammaquents, 0 to 2 percent slopes	       			
615B Cress sandy loam, 0 to 6 percent slopes	  AVDe   			1
615C Cress sandy loam, 6 to 12 percent slopes	  AVDe   	     		1
615D Cress sandy loam, 12 to 30 percent slopes	!	     	 	1
623A Capitola muck, 0 to 2 percent slopes, very stony	į			
624A Ossmer silt loam, 0 to 3 percent slopes	  ASaI   		  AAt   	1
632AAftad fine sandy loam, 0 to 2 percent slopes	!	  AAt, ACaCi   	 	1

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	   Dominant   habitat   type 	   Codominant   habitat   types	Common   habitat types 	   Region   
632B Aftad fine sandy loam, 2 to 6 percent slopes	!	  AAt, ACaCi   	  -  -	   1 
632CAftad fine sandy loam, 6 to 12 percent slopes	 	  AAt, ACaCi   		   1 
633F Pence and Padus soils, 30 to 45 percent slopes	 	AVVb, ATM	 	   3 
648BSconsin silt loam, 1 to 6 percent slopes	  ACaCi   	     		   1 
670C	  AVDe   	     		   1 
670E	  AVDe     	 		   1   
671B	  AVDe     	     	PArVAm   	   1   
680BStanberry-Pence complex, 2 to 6 percent slopes, stony	į	     	  AVVb   	   3 
683A Tipler sandy loam, 0 to 3 percent slopes	   <b>ATM</b>   	     	     	     
706A Winterfield-Totagatic complex, 0 to 2 percent slopes, frequently flooded	       	ASaI, Lfp	 	1   
724A Rib-Rock outcrop complex, 0 to 2 percent slopes	Lwmin     	 	 	     
726BSissabagama loamy sand, 0 to 6 percent slopes	 	PArVAm, AVDe     	 	     
733A	Lwmin     	 	 	     
771A		 	 	1

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	   Dominant   habitat   type 	Codominant habitat types	   Common   habitat types   	   Region     
827A Scoba sandy loam, 0 to 3 percent slopes		  AAt, AVDe 		   1 
853C Frogcreek-Stinnett-Wozny complex, 0 to 15 percent slopes, very stony	 	  ATM, ATAtOn     	  Lwmin   	   3   
856BStinnett silt loam, 0 to 4 percent slopes, very stony	į	  ACaI, ATAtOn     	   ATM   	   3   
857BFrogcreek silt loam, 2 to 6 percent slopes, very stony	į	ATM, AOCa	  ATD   	   3   
857C Frogcreek silt loam, 6 to 15 percent slopes, very stony	       	  AOCa, ATM     	  ATD   	   3   
873BStanberry sandy loam, 1 to 6 percent slopes, very stony	   ATM     	       		   3   
873CStanberry sandy loam, 6 to 15 percent slopes, very stony	   <b>ATM</b>     	 		   3   
873DStanberry sandy loam, 15 to 30 percent slopes, very stony	!	 		   3   
905ACublake loamy sand, 0 to 3 percent slopes	 	  PArVAa, AVVb   		   3 
926A Flink loamy sand, 0 to 3 percent slopes	  ArAbVC   	     	  PArVAa   	   3   
943DStanberry, very stony- Greenwood complex, 0 to 35 percent slopes	į	       	  Laorg   	   3   
948ABillyboy silt loam, 0 to 3 percent slopes		     		   1   
970C Keweenaw, stony-Pence, stony-Greenwood complex, 0 to 15 percent slopes	į	  AVDe, AAt     	  Laorg   	   1   
970E	į	  AVDe, AAt     	  Laorg     	   1     

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	   Dominant   habitat   type 	Codominant   habitat   types	Common   habitat types 	   Region     
1070C Fremstadt, stony-Cress complex, 6 to 15 percent slopes	         	AVDe, PArVAm	 	   1   
1070D Fremstadt, stony-Cress complex, 15 to 30 percent slopes	     	AVDe, PArVAm	     	   1   
1080BSpoonerhill, stony-Cress complex, 1 to	     	  AVDe, PArVAm 	 	   1 
6 percent slopes	i I	AVDe, PArVAm	į	1
1653CStanberry-Parkfalls-Wozny complex, 0 to 15 percent slopes, very stony	       	ATM, ATAtOn	Lwmin	   3   
2015. Pits	     			
2050. Landfill	   			
3011A Barronett silt loam, 0 to 2 percent slopes				1
3125A Meehan loamy sand, 0 to 2 percent slopes	  ArVRp   		PArVAm 	1
3126A Wurtsmith loamy sand, 0 to 3 percent slopes	  PArVAm   		 	1
3276AAu Gres loamy sand, 0 to 3 percent slopes	  ArAbVC   		  PArVaAa   	3
3312B Glendenning, very stony- Glendenning complex, 0 to 4 percent slopes	  ArVRp   		AVDe	   1   
3336A Fenander fine sandy loam, 0 to 2 percent slopes	  Lwmin   		 	
3403A Loxley, Beseman, and Dawson soils, 0 to 1 percent slopes				
3424C Frogcreek-Magroc-Stinnett complex, 0 to 15 percent slopes, very stony, rocky	į Į	ATM, ATAtOn	 	   3   

Table 15.--Forest Habitat Types--Continued

	I	1	I	1
Map symbol and map unit name	Dominant habitat type	Codominant   habitat   types	Common   habitat types 	Region
3446A Newson muck, 0 to 2 percent slopes	1		 	     
3448BGrettum loamy sand, 0 to 6 percent slopes	   PArVAm   		 	1
3448CGrettum loamy sand, 6 to 12 percent slopes	1			1
3516ASlimlake sandy loam, 0 to 3 percent slopes	     	PArVAm, AVDe	 	1
3629B Perida loamy sand, 0 to 4 percent slopes	  PArVAm   		 	1
M-W. Miscellaneous water	     		   	
W. Water	    -		 	

## Table 16a.--Recreational Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Camp areas		Picnic areas		   Playgrounds 	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Valu
3A:			 		 	
Totagatic	Very limited   Depth to   saturated zone	1.00	  Very limited   Depth to   saturated zone	1.00	  Very limited   Depth to   saturated zone	1.00
	Flooding   Ponding	1.00	Ponding   Flooding	1.00	Flooding   Ponding	1.00
Bowstring	Depth to	1.00	  Very limited   Depth to	1.00	: -	1.00
	saturated zone   Flooding   Content of	  1.00  1.00	saturated zone   Content of   organic matter	1.00	saturated zone   Content of   organic matter	1.00
	organic matter Ponding	1.00	Ponding   Flooding 	1.00  0.40 	Flooding   Ponding 	1.00  1.00 
Ausable	Very limited   Depth to   saturated zone   Flooding	  1.00    1.00	Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	saturated zone	  1.00    1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
22A: Comstock	    Very limited   Depth to	      1.00	    Very limited   Depth to	      1.00	    Very limited   Depth to	      1.00
	saturated zone		saturated zone		saturated zone	
24A: Poskin	  -  Very limited	   	    Very limited	   	    Very limited	   
	Depth to   saturated zone	1.00   	Depth to   saturated zone 	1.00   	Depth to saturated zone	1.00   
27A: Scott Lake	  Not limited 	     	  Not limited 	     	  Somewhat limited   Gravel content	0.04
28B:				į		
Haugen, very stony	Somewhat limited   Restricted   permeability	  0.60 	Somewhat limited   Restricted   permeability	  0.60 	Somewhat limited   Restricted   permeability	  0.60 
	Too stony Depth to saturated zone	0.50	Too stony Depth to saturated zone	0.50  0.19 	Too stony Depth to	0.50  0.50  0.39
					saturated zone Gravel content	0.05
Haugen	Restricted	0.60		    0.60	  Somewhat limited   Restricted	0.60
	permeability   Depth to   saturated zone	0.39	permeability   Depth to   saturated zone 	  0.19   	permeability   Slope   Depth to   saturated zone	  0.50  0.39
	 	   	;   	   	Gravel content Content of large stones	0.05

Table 16a.--Recreational Development--Continued

Map symbol and soil name	   Camp areas   		   Picnic areas   		Playgrounds	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
28B: Rosholt, very stony	  Somewhat limited   Too stony   	      0.50     	  Somewhat limited   Too stony   	      0.50     	  Somewhat limited   Slope   Too stony   Gravel content   Content of large   stones	    0.50  0.50  0.03  0.01
Rosholt	  Not limited     	       	  Not limited     	     	  Somewhat limited   Slope   Gravel content	  0.50  0.04
28C: Haugen, very stony	Somewhat limited   Restricted   permeability   Too stony   Depth to   saturated zone   Slope	  0.60    0.50  0.39    0.04	Somewhat limited   Restricted   permeability   Too stony   Depth to   saturated zone   Slope	  0.60    0.50  0.19    0.04	Very limited   Slope   Restricted   permeability   Too stony   Depth to   saturated zone   Gravel content	  1.00  0.60    0.50  0.39    0.05
Haugen	Somewhat limited   Restricted   permeability   Depth to   saturated zone   Slope	  0.60    0.39    0.04	Somewhat limited   Restricted   permeability   Depth to   saturated zone   Slope	  0.60    0.19    0.04	Very limited   Slope   Restricted   permeability   Depth to   saturated zone   Gravel content   Content of large   stones	  1.00  0.60    0.39    0.05  0.03
Rosholt, very stony	   Somewhat limited   Too stony   Slope 	  0.50  0.04 	   Somewhat limited   Too stony   Slope 	  0.50  0.04 		  1.00  0.50  0.03  0.01
Rosholt	  Somewhat limited   Slope   	    0.04 	  Somewhat limited   Slope   	    0.04 	  Very limited   Slope   Gravel content 	  1.00  0.04
33B: Chetek	  Not limited     		  Not limited     	         	  Somewhat limited   Slope   Gravel content   Content of large   stones	  0.50  0.02  0.01 
33C: Chetek	  Somewhat limited   Slope   	  0.04     	  Somewhat limited   Slope   	  0.04   		  1.00  0.02  0.01
38A: Rosholt	  Not limited   		  Not limited   	     	  Somewhat limited   Gravel content	    0.04 

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		   Playgrounds 		
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value	
38B: Rosholt	  Not limited   	       	  Not limited   	       	  Somewhat limited   Slope   Gravel content	    0.50  0.04	
38C: Rosholt	  Somewhat limited   Slope 	    0.04	  Somewhat limited   Slope 	    0.04	  Very limited   Slope   Gravel content	  1.00  0.04	
38D: Rosholt	  Very limited   Slope 	      1.00 	  Very limited   Slope 	      1.00 	  Very limited   Slope   Gravel content	    1.00  0.04	
42D: Amery	  Very limited   Slope   Too stony   Restricted   permeability	  1.00  0.50  0.21   	   Very limited   Slope   Too stony   Restricted   permeability	  1.00  0.50  0.21 	Too stony	  1.00  0.50  0.21    0.05  0.03	
43B: Antigo	    Not limited 		    Not limited 		  Somewhat limited   Slope	0.50	
43C: Antigo	    Somewhat limited   Slope 	      0.37	    Somewhat limited   Slope 	      0.37	    Very limited   Slope 	1.00	
43D: Antigo	  Very limited   Slope	    1.00	  Very limited   Slope	    1.00	  Very limited   Slope	1.00	
48A: Brill	  Somewhat limited   Depth to   saturated zone	    0.98 	  Somewhat limited   Depth to   saturated zone	    0.75 	  Somewhat limited   Depth to   saturated zone	    0.98 	
63A: Crystal Lake	  Somewhat limited   Depth to   saturated zone   Restricted   permeability	  0.39    0.21	  Somewhat limited   Restricted   permeability   Depth to   saturated zone	  0.21    0.19	  Somewhat limited   Depth to   saturated zone   Restricted   permeability	    0.39    0.21	
63B: Crystal Lake		  0.39    0.21 	Somewhat limited   Restricted   permeability   Depth to   saturated zone	  0.21    0.19 	Somewhat limited   Slope   Depth to   saturated zone   Restricted   permeability	  0.50  0.39    0.21	

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
						1
63C:	İ	į		į	İ	İ
Crystal Lake	!	!	Somewhat limited	:	Very limited	
	Depth to saturated zone	0.39	Restricted	0.21	-	1.00
	Restricted	0.21	permeability   Depth to	0.19	Depth to saturated zone	0.39
	permeability		saturated zone		Restricted	0.21
	Slope	0.04	Slope	0.04	permeability	
63E:	 		   Vamue limited		  Town limited	
Crystal Lake	Slope	1.00	Very limited   Slope	1.00	Very limited   Slope	1.00
	Restricted	0.21	Restricted	0.21	-	0.21
	permeability		permeability		permeability	İ
64A: Totagatic	  Town limited		  Very limited		  Very limited	
iotagatic	Depth to	1.00		1.00	_	1.00
	saturated zone		saturated zone		saturated zone	1
	Flooding	1.00	Ponding	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
						1
Winterfield	Very limited   Depth to	1.00	Very limited	1.00	Very limited	1.00
	saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Too sandy	0.79	Flooding	1.00
	Too sandy	0.79	Flooding	0.40	Too sandy	0.79
	!	ļ				ļ
69B:	  Somewhat limited		  Somewhat limited		  Somewhat limited	
Keweenaw	Too sandy	0.76	!	0.76	Too sandy	0.76
	100 banay		100 banay		Slope	0.50
		İ		İ	Content of large	
	İ	į		İ	stones	į
_						
Sayner	Somewhat limited   Too sandy	0.87	Somewhat limited   Too sandy	0.87	Somewhat limited   Too sandy	0.87
	100 sandy		100 sandy	0.07	Slope	0.50
					Content of large	
	İ	į		İ	stones	į
	!	ļ			Gravel content	0.02
Vilas	  Somewhat limited		  Somewhat limited		  Somewhat limited	
Vilas	Too sandy	0.87	Too sandy	0.87	!	0.87
	100 sandy		100 sandy		Slope	0.50
				İ	Gravel content	0.04
	[	[				1
69C:	 				 	
Keweenaw	Too sandy	0.76	Somewhat limited   Too sandy	  0.76	Very limited   Slope	1.00
	Slope	0.16	Slope	0.16	-	0.76
			22020		Content of large	1
	İ	İ		į	stones	İ
G	 		Gamarahan 32-24-2		 	
Sayner	Somewhat limited   Too sandy	0.87	Somewhat limited   Too sandy	  0.87	Very limited   Slope	1.00
	Slope	0.16	Too sandy   Slope	0.16	_	0.87
					Content of large	
	t contract the contract to the					
					stones	

Table 16a.--Recreational Development--Continued

Map symbol and soil name	   Camp areas   		   Picnic areas   		Playgrounds	
	   Rating class and   limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
		<u> </u>				<del> </del>
69C:						
Vilas	Somewhat limited   Too sandy	0.87	Somewhat limited   Too sandy	  0.87	Very limited   Slope	1.00
	Slope	0.16	-	0.16	: -	0.87
					Gravel content	0.04
69E:	 		 		 	
Keweenaw	Very limited		Very limited		Very limited	
	Slope	1.00	-	1.00	: -	1.00
	Too sandy	0.76	Too sandy	0.76		0.76
	 		 		Content of large   stones	0.01
Sayner	  Verv limited		  Very limited		  Very limited	
	Slope	1.00	_	1.00	: -	1.00
	Too sandy	0.87	Too sandy	0.87	Too sandy	0.87
	 	j I	 	j I	Content of large	0.05
					Gravel content	0.02
Vilas	  Very limited		  Very limited	 	  Very limited	
	Slope	1.00	-	1.00		1.00
	Too sandy	0.87 	Too sandy 	0.87 	Too sandy Gravel content	0.87
74B:	 		 		 	
Vilas	  Somewhat limited	i	  Somewhat limited	İ		
	Too sandy	0.87		0.87	!	0.87
		ĺ		ĺ	Slope	0.12
	[ 		[ 		Gravel content	0.06
74C:		į		į		
Vilas	Somewhat limited	1	Somewhat limited	1	Very limited	
	Too sandy	0.87	-	0.87		1.00
	Slope 	0.37	Slope 	0.37	Too sandy Gravel content	0.87
74D:				 	 	
Vilas	Very limited	ĺ	Very limited		Very limited	İ
	Slope	1.00	-	1.00		1.00
	Too sandy	0.87 	Too sandy 	0.87 	Too sandy Gravel content	0.87 0.06
100B:	 		 		 	
Menahga	  Verv limited	i	  Very limited		  Very limited	
3.	Too sandy	1.00		1.00	: -	1.00
	-   	į	-   	į	Slope	0.12
100C:	 	į	 		 	
Menahga			Somewhat limited	0.04	Very limited	1 00
	Slope 	0.04	Slope 	0.04	Slope	1.00
100D: Menahga	  Verv limited		  Very limited		  Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00

Table 16a.--Recreational Development--Continued

Map symbol and soil name	   Camp areas 		   Picnic areas 		   Playgrounds   	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
127D:	 		 		 	
Amery	  Very limited		  Very limited		  Very limited	1
-	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Restricted	0.21	Restricted	0.21	Restricted	0.21
	permeability		permeability	ļ	permeability	
	 		 		Gravel content	0.05
					Content of large   stones	
Rosholt	  Very limited		  Very limited		  Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
					Gravel content	0.03
	 		 		Content of large   stones	0.01
127E:	 		 		 	
Amery	Very limited	İ	Very limited	Ì	Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Restricted	0.21	Restricted permeability	0.21	Restricted	0.21
	permeability		permeability	l I	permeability Gravel content	0.05
	 			İ	Content of large	
		į			stones	į
Rosholt	  Very limited		  Very limited		  Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	 		 	l I	Gravel content Content of large	0.03
					stones	
156B:	 		 		 	
Magnor, very stony		[	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	0.50	saturated zone Too stony	0.50	saturated zone Too stony	0.50
	Too stony Restricted	0.43	Restricted	0.43	Restricted	0.43
	permeability		permeability		permeability	
	·	į	i -	į	Content of large	0.01
	  -	İ	 	İ	stones	
Magnor	: -		Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone Restricted	0.43	saturated zone	0.43	saturated zone Restricted	0.43
	permeability		permeability		permeability	
157B:	 		 		 	
Freeon, very stony	Very limited		Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Too stony Restricted	0.50	Too stony	0.50	Slope	0.50
	!	0.43	Restricted	0.43	Too stony	0.50
	permeability		permeability		Restricted	0.43

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		   Picnic areas 		   Playgrounds 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
157B: Freeon	  Very limited   Depth to   saturated zone   Restricted   permeability	    1.00    0.43	  Very limited   Depth to   saturated zone   Restricted   permeability	    1.00    0.43	   Very limited   Depth to   saturated zone   Slope   Restricted   permeability	    1.00    0.50  0.43
157C:	 	     	 	   	Content of large stones	0.01     
Freeon, very stony	Very limited   Depth to   saturated zone   Too stony   Restricted   permeability   Slope	  1.00    0.50  0.43    0.04	Very limited   Depth to   saturated zone   Too stony   Restricted   permeability   Slope	  1.00    0.50  0.43    0.04	Very limited   Depth to   saturated zone   Slope   Too stony   Restricted   permeability	  1.00    1.00  0.50  0.43
Freeon	Very limited   Depth to   saturated zone   Restricted   permeability   Slope	  1.00    0.43    0.04	Very limited    Depth to   saturated zone   Restricted   permeability   Slope	  1.00    0.43    0.04	Very limited    Depth to   saturated zone   Slope   Restricted   permeability   Content of large   stones	  1.00    1.00  0.43    0.01
160A: Oesterle	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	1.00
182B: Padus	  Not limited     	     	  Not limited     	       	  Somewhat limited   Slope   Gravel content	  0.12  0.02
182C: Padus	  Somewhat limited   Slope 	0.37	  Somewhat limited   Slope 	    0.37 	  Very limited   Slope   Gravel content	  1.00  0.02
192A: Worcester	  Very limited   Depth to   saturated zone	    1.00   	  Very limited   Depth to   saturated zone	    1.00   	  Very limited   Depth to   saturated zone   Gravel content	1.00
193A: Minocqua	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	   Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	1.00
215B: Pence	  Not limited       	         	  Not limited  -  -	         	  Somewhat limited   Slope   Content of large   stones   Gravel content	  0.12  0.01    0.01

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds 	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
215C: Pence	  Somewhat limited   Slope   	    0.37   	  Somewhat limited   Slope   	      0.37   	Very limited Slope Content of large stones Gravel content	    1.00  0.01    0.01
215D: Pence	  Very limited   Slope   	    1.00     	  Very limited   Slope   	    1.00     	  Very limited   Slope   Content of large   stones   Gravel content	  1.00  0.01    0.01
315A: Rib	  Very limited   Depth to   saturated zone   Ponding	1.00	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	1.00
337A: Plover	Very limited   Depth to   saturated zone   Restricted   permeability	  1.00    0.60	  Very limited   Depth to   saturated zone   Restricted   permeability	  1.00    0.60	  Very limited   Depth to   saturated zone   Restricted   permeability	  1.00    0.60
368B: Mahtomedi	  Somewhat limited   Too sandy 	0.72	  Somewhat limited   Too sandy 	    0.72   	  Somewhat limited   Too sandy   Slope   Gravel content	  0.72  0.50  0.04
Cress	  Not limited 		  Not limited 	   	  Somewhat limited   Slope	0.50
368C: Mahtomedi	  Somewhat limited   Too sandy   Slope	0.72	  Somewhat limited   Too sandy   Slope	    0.72  0.04	:	  1.00  0.72  0.04
Cress	  Somewhat limited   Slope	0.04	  Somewhat limited   Slope	0.04	  Very limited   Slope	1.00
368D: Mahtomedi	  Very limited   Slope   Too sandy	  1.00  0.72	  Very limited   Slope   Too sandy	    1.00  0.72	:	  1.00  0.72  0.04
Cress	  Very limited   Slope	1.00	  Very limited   Slope	    1.00	  Very limited   Slope	1.00
371A: Croswell	  Somewhat limited   Too sandy   Depth to   saturated zone	    0.87  0.39 	  Somewhat limited   Too sandy   Depth to   saturated zone	    0.87  0.19 	:	    0.87  0.39    0.06

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas   		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
380B: Cress	Not limited	     	    Not limited 	     	    Somewhat limited   Slope	      0.50
Rosholt    	Not limited	     	  Not limited   	     	  Somewhat limited   Slope   Gravel content	  0.50  0.04
380C:     Cress	Somewhat limited Slope	0.04	    Somewhat limited   Slope	      0.04	  Very limited   Slope	
Rosholt	Somewhat limited Slope	0.04	  Somewhat limited   Slope 	  0.04 	  Very limited   Slope   Gravel content	  1.00  0.04
380D:   Cress	Very limited Slope	1.00	    Very limited   Slope	1.00	  Very limited   Slope	1.00
Rosholt	Very limited Slope	1.00	  Very limited   Slope 	1.00	  Very limited   Slope   Gravel content	1.00
383B: Mahtomedi	Somewhat limited Too sandy	    0.72   	  Somewhat limited   Too sandy 	      0.72   	  Somewhat limited   Too sandy   Slope   Gravel content	  0.72  0.12  0.04
383C: Mahtomedi	Somewhat limited Too sandy Slope	    0.72  0.04	  Somewhat limited   Too sandy   Slope	    0.72  0.04		  1.00  0.72  0.04
383D: Mahtomedi	Very limited Slope Too sandy	  1.00  0.72	  Very limited   Slope   Too sandy	    1.00  0.72	: -	  1.00  0.72  0.04
396B: Friendship	Very limited Too sandy	1.00	    Very limited   Too sandy	1.00	    Very limited   Too sandy	1.00
Wurtsmith	Very limited Too sandy Depth to saturated zone	  1.00  0.39 	  Very limited   Too sandy   Depth to   saturated zone	  1.00  0.19 	  Very limited   Too sandy   Depth to   saturated zone   Gravel content	  1.00  0.39    0.06
Grayling	Very limited Too sandy	    1.00 	  Very limited   Too sandy   	    1.00 	  Very limited   Too sandy   Slope	  1.00  0.12
397A:   Perchlake	Very limited  Depth to  saturated zone	    1.00	    Very limited   Depth to	1.00	    Very limited   Depth to	1.00

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas 		Picnic areas		   Playgrounds 	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
2000						
399B: Grayling	  Very limited   Too sandy 	1.00	  Very limited   Too sandy 	    1.00	  Very limited   Too sandy   Slope	  1.00  0.12
399C: Grayling	  Very limited   Too sandy   Slope	    1.00  0.04	  Very limited   Too sandy   Slope	      1.00  0.04	  Very limited   Slope   Too sandy	    1.00  1.00
399D: Grayling	  Very limited   Too sandy   Slope	    1.00  1.00	  Very limited   Too sandy   Slope	    1.00  1.00	  Very limited   Slope   Too sandy	  1.00  1.00
405A:		į				į
Lupton	Very limited   Depth to   saturated zone	1.00	Very limited   Depth to   saturated zone	1.00	Very limited   Depth to   saturated zone	1.00
	Content of organic matter Ponding	1.00    1.00	Content of organic matter Ponding	1.00    1.00	Content of organic matter Ponding	1.00    1.00
Cathro	Very limited   Depth to   saturated zone   Content of	  1.00    1.00	Very limited   Depth to   saturated zone   Content of	  1.00    1.00	Very limited   Depth to   saturated zone   Content of	  1.00    1.00
	organic matter Ponding	1.00	organic matter Ponding	1.00	organic matter Ponding	1.00
Tawas	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	  Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00 
406A:	l		l		 	
Loxley	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	Very limited    Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	Very limited    Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00 
407A:					 	
Seelyeville	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00 	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00 
Markey	Depth to saturated zone	  1.00 		    1.00 		
	Content of organic matter Ponding	1.00    1.00	Content of   organic matter   Ponding 	1.00    1.00	Content of   organic matter   Ponding 	1.00    1.00

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		   Picnic areas   		   Playgrounds   	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
410A:	 		 		 	
Seelyeville	Very limited	į	Very limited	İ	Very limited	į
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of   organic matter	1.00	Content of	1.00	Content of	1.00
	Ponding	1.00	organic matter Ponding	1.00	organic matter Ponding	1.00
Cathro	  Very limited		  Very limited		  Very limited	
Cacinio	Depth to	1.00	Depth to	1.00		1.00
	saturated zone		saturated zone		saturated zone	
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter		organic matter		organic matter	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
412A:		į		į		į
Rifle	Very limited   Depth to	1.00	Very limited   Depth to	1.00	Very limited   Depth to	1.00
	saturated zone	1	saturated zone	1	saturated zone	1
	Ponding	1.00	Ponding	1.00	Ponding	1.00
Tacoosh	  Very limited		  Very limited		  Very limited	
14000011	Depth to	1.00	: -	1.00		1.00
	saturated zone	i	saturated zone	İ	saturated zone	i
	Ponding	1.00	Ponding	1.00	Ponding	1.00
415A:						
Greenwood	· -	1	Very limited	:	Very limited	
	Depth to	1.00	-	1.00		1.00
	saturated zone Content of	1.00	saturated zone Content of	1.00	saturated zone Content of	1.00
	organic matter		organic matter		organic matter	1
	Ponding	1.00	Ponding	1.00		1.00
439B:			 		 	
Graycalm	Somewhat limited	İ	Somewhat limited	İ	Somewhat limited	İ
	Too sandy	0.30	Too sandy	0.30	Too sandy	0.30
	 		 	 	Slope 	0.12
Menahga	Not limited	į	Not limited	į	Somewhat limited	İ
			 	 	Slope 	0.12
439C:	į	į	į	į		İ
Graycalm		1	Somewhat limited	1	Very limited	
	Too sandy Slope	0.30	Too sandy   Slope	0.30	Slope   Too sandy	1.00
Menahga		1	Somewhat limited	1	Very limited	
	Slope 	0.04	Slope 	0.04	Slope 	1.00
439D:	į	į	į	į		į
Graycalm	-	1	Very limited		Very limited	11 00
	Slope   Too sandy	1.00  0.30	Slope   Too sandy	1.00  0.30	Slope   Too sandy	1.00
Menahga	-	[	Very limited	  1.00	Very limited	ļ
	Slope	1.00	Slope		Slope	1.00

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		   Picnic areas 		   Playgrounds 	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features		limiting features	
						1
441C: Freeon	  Very limited		  Very limited		  Very limited	
FreeOH	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	1	saturated zone	1	saturated zone	1
	Too stony	0.50	Too stony	0.50	Slope	1.00
	Restricted	0.43	Restricted	0.43	Too stony	0.50
	permeability	i	permeability	i	Restricted	0.43
	Slope	0.37	Slope	0.37	permeability	į
Cathro	  Not rated 	   	  Not rated 	   	  Not rated 	
442C:						i
Haugen	Somewhat limited		Somewhat limited		Very limited	
	Restricted	0.60	Restricted	0.60	Slope	1.00
	permeability		permeability		Restricted	0.60
	Too stony	0.50	Too stony	0.50	permeability	
	Depth to	0.39	Depth to	0.19	Too stony	0.50
	saturated zone	ļ	saturated zone		Depth to	0.39
					saturated zone	
	 		 		Gravel content	0.05
Greenwood	  Very limited		  Very limited		  Very limited	i
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	İ	saturated zone	İ
	Ponding	1.00	Ponding	1.00	Ponding	1.00
443D:	 		l		  -	-
Amery	  Very limited	1	  Very limited		  Very limited	1
imer y	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Restricted	0.21	Restricted	0.21	:	0.21
	permeability	i	permeability	i	permeability	i
	İ	İ		İ	Gravel content	0.05
	İ	j	İ	į	Content of large	0.03
					stones	
Greenwood	  Very limited		  Very limited		  Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	İ	saturated zone	İ
	Ponding	1.00	Ponding	1.00	Ponding	1.00
461A:	 		 		 	
Bowstring	  Very limited		  Very limited		  Very limited	1
3	Depth to	1.00	! <del>-</del>	1.00		1.00
	saturated zone	i	saturated zone	İ	saturated zone	i
	Flooding	1.00	Content of	1.00	Content of	1.00
	Content of	1.00	organic matter		organic matter	
	organic matter		Ponding	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
484A:			 		 	
Greenwood	  Very limited		  Very limited		  Very limited	i
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	i	saturated zone	i
	Ponding	1.00	Ponding	1.00	Ponding	1.00

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas	Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
		<del> </del>		i i		<del>†                                    </del>	
484A:				ļ			
Beseman			Very limited		Very limited		
	Depth to	1.00	Depth to	1.00		1.00	
	saturated zone Content of	1 00	saturated zone	11 00	saturated zone	11 00	
	organic matter	1.00	Content of	1.00	Content of	1.00	
	Ponding	1.00	organic matter Ponding	1.00	organic matter Ponding	1.00	
	Restricted	0.21		0.21		0.21	
	permeability		permeability		permeability		
495B:	 						
Karlsborg	Somewhat limited	i	Somewhat limited	i	Somewhat limited	i	
-	Depth to	0.98	Restricted	0.98	Depth to	0.98	
	saturated zone	İ	permeability	İ	saturated zone	İ	
	Restricted	0.98	Too sandy	0.81	Restricted	0.98	
	permeability		Depth to	0.75	permeability		
	Too sandy	0.81	saturated zone		Too sandy	0.81	
					Slope	0.50	
Grettum	Somewhat limited	i	  Somewhat limited	i	  Somewhat limited		
	Too sandy	0.81	Too sandy	0.81	Too sandy	0.81	
	į	į	-	į	Slope	0.50	
Perida	  Somewhat limited		  Somewhat limited		  Somewhat limited		
	Too sandy	0.81	Too sandy	0.81	Too sandy	0.81	
		į	-   	į	Slope	0.50	
495C:			 				
Karlsborg	Somewhat limited		Somewhat limited		Very limited		
	Depth to	0.98	!	0.98	<u>-</u>	1.00	
	saturated zone		permeability	!	Depth to	0.98	
	Restricted	0.98	Too sandy	0.81	!		
	permeability		Depth to	0.75	!	0.98	
	Too sandy Slope	0.81	saturated zone   Slope	0.04	permeability Too sandy	0.81	
	Slope		510pe 		100 sandy 		
Grettum	Somewhat limited		Somewhat limited		Very limited		
	Too sandy	0.81		0.81		1.00	
	Slope	0.04	Slope 	0.04	Too sandy	0.81	
Perida	Somewhat limited		Somewhat limited		Very limited		
	Too sandy	0.81		0.81	<u>-</u>	1.00	
	Slope	0.04	Slope 	0.04	Too sandy	0.81	
495D:	į	į		į		į	
Karlsborg	: -	1	Very limited	1	Very limited		
	Slope	1.00	:	1.00	<u>-</u>	1.00	
	Depth to	0.98	!	0.98	· -	0.98	
	saturated zone   Restricted	10.00	permeability	0.81	saturated zone Restricted	10.00	
	permeability	0.98	Too sandy Depth to	0.75		0.98	
	Too sandy	0.81	: -		Too sandy	0.81	
Grettum	  Very limited		  Very limited		  Very limited		
	Slope	1.00	Slope	1.00		1.00	
	Too sandy	0.81	:	0.81		0.81	
Perida	  Very limited		  Very limited		  Very limited		
- = = ==	Slope	1.00	Slope	1.00	-	1.00	
	Too sandy	0.81	Too sandy	0.81	<u>-</u>	0.81	
	į	İ	İ	İ		İ	

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas   		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
497A: Meenon	   Very limited   Depth to   saturated zone   Restricted   permeability   Too sandy	    1.00    1.00    0.81	   Very limited   Depth to   saturated zone   Restricted   permeability   Too sandy	    1.00    1.00    0.81	Very limited Depth to saturated zone Restricted permeability Too sandy Gravel content	  1.00    1.00    0.81  0.06
515A: Manitowish	  Not limited     	         	  Not limited     	         	  Somewhat limited   Content of large   stones   Gravel content	    0.01    0.01
521A: Dody	Very limited   Depth to   saturated zone   Ponding   Restricted   permeability	  1.00    1.00  0.98	Very limited   Depth to   saturated zone   Ponding   Restricted   permeability	  1.00    1.00  0.98	Very limited   Depth to   saturated zone   Ponding   Restricted   permeability	  1.00    1.00  0.98
524E: Rock outcrop	  Not rated		  Not rated	 	  Not rated	
Frogcreek	   Very limited   Depth to   saturated zone   Too stony   Restricted   permeability	  1.00    0.50  0.21	   Very limited   Depth to   saturated zone   Too stony   Restricted   permeability	  1.00    0.50  0.21	   Very limited   Depth to   saturated zone   Slope   Too stony   Restricted   permeability	  1.00    1.00  0.50  0.21
Metonga	   Very limited   Slope   Too stony 	  1.00  0.47   	   Very limited   Slope   Too stony 	  1.00  0.47 		
542B:	 		 		 	
Haugen, very stony	Somewhat limited Restricted permeability Too stony Depth to saturated zone	  0.60    0.50  0.39   	Somewhat limited Restricted permeability Too stony Depth to saturated zone	  0.60    0.50  0.19   	Somewhat limited Restricted permeability Slope Too stony Depth to saturated zone Gravel content	  0.60  0.50  0.50  0.39 
Haugen		  0.60    0.39     		  0.60    0.19     	Somewhat limited   Restricted   permeability   Slope   Depth to   saturated zone   Gravel content   Content of large   stones	  0.60  0.50  0.39    0.05  0.03

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
542C:						
Haugen, very stony	Somewhat limited   Restricted   permeability   Too stony   Depth to   saturated zone   Slope	  0.60    0.50  0.39    0.04	Somewhat limited   Restricted   permeability   Too stony   Depth to   saturated zone   Slope	  0.60    0.50  0.19    0.04	Very limited Slope Restricted permeability Too stony Depth to saturated zone Gravel content	  1.00  0.60    0.50  0.39    0.05
Haugen		  0.60    0.39    0.04 	Somewhat limited   Restricted   permeability   Depth to   saturated zone   Slope	  0.60    0.19    0.04 	Very limited   Slope   Restricted   permeability   Depth to   saturated zone   Gravel content   Content of large   stones	  1.00  0.60    0.39    0.05  0.03
543B: Anigon	  Not limited   		  Not limited   	     	  Somewhat limited   Slope 	    0.50
543C2: Anigon	  Somewhat limited   Slope 	0.04	  Somewhat limited   Slope 	    0.04	  Very limited   Slope	1.00
544F: Menahga	  Very limited   Slope	    1.00	  Very limited   Slope	    1.00	  Very limited   Slope	    1.00
Mahtomedi	  Very limited   Slope   Too sandy	  1.00  0.72 	  Very limited   Slope   Too sandy 	  1.00  0.72	   Very limited   Slope   Too sandy   Gravel content	  1.00  0.72  0.04
555A: Fordum	  Very limited   Depth to   saturated zone   Flooding   Ponding	    1.00    1.00  1.00	Very limited Depth to saturated zone Ponding Flooding	    1.00    1.00  0.40	   Very limited   Depth to   saturated zone   Flooding   Ponding   Gravel content	    1.00    1.00  1.00  0.04
574B: Sayner	  Somewhat limited   Too sandy   	    0.87     	  Somewhat limited   Too sandy   	    0.87     		  0.87  0.12  0.02  0.01
574C: Sayner	  Somewhat limited   Too sandy   Slope 	    0.87  0.37 	  Somewhat limited   Too sandy   Slope 	    0.87  0.37 	  Very limited   Slope   Too sandy   Gravel content   Content of large   stones	    1.00  0.87  0.02  0.01

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds   	
	Rating class and   limiting features	Value	Rating class and limiting features	Value	   Rating class and   limiting features	Value
574E: Sayner	  Very limited   Slope   Too sandy 	    1.00  0.87   	  Very limited   Slope   Too sandy 	    1.00  0.87   	  Very limited   Slope   Too sandy   Gravel content   Content of large   stones	    1.00  0.87  0.02  0.01
579B: Parkfalls	   Very limited   Depth to   saturated zone   Too stony   Restricted   permeability	  1.00    0.50  0.21 	   Very limited   Depth to   saturated zone   Too stony   Restricted   permeability	  1.00    0.50  0.21 	Very limited   Depth to   saturated zone   Too stony   Restricted   permeability   Content of large   stones	  1.00    0.50  0.21    0.01
600A: Haplosaprists	  Not rated		  Not rated	 	  Not rated	
Psammaquents	  Not rated 	   	  Not rated 	   	  Not rated 	
615B: Cress	    Not limited 		  Not limited	     	    Somewhat limited   Slope	0.12
615C: Cress	    Somewhat limited   Slope 	0.04	  Somewhat limited   Slope	      0.04	    Very limited   Slope 	1.00
615D: Cress	  Very limited   Slope	1.00	  Very limited   Slope	    1.00	  Very limited   Slope	    1.00
623A: Capitola	  Very limited   Depth to   saturated zone   Ponding   Too stony	  1.00    1.00  0.50	   Very limited   Depth to   saturated zone   Ponding   Too stony	  1.00    1.00  0.50	  Very limited   Depth to   saturated zone   Ponding   Too stony	  1.00    1.00  0.50
624A: Ossmer	  Very limited   Depth to   saturated zone	    1.00 	   Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00 
632A: Aftad	  Somewhat limited   Depth to   saturated zone	    0.39 	  Somewhat limited   Depth to   saturated zone	    0.19 	  Somewhat limited   Depth to   saturated zone	0.39
632B: Aftad	  Somewhat limited   Depth to   saturated zone	    0.39   	  Somewhat limited   Depth to   saturated zone	    0.19   	  Somewhat limited   Slope   Depth to   saturated zone	  0.50  0.39 

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas 		Picnic areas		Playgrounds	
	Rating class and	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
632C: Aftad	  Somewhat limited   Depth to   saturated zone   Slope	    0.39    0.04	saturated zone	      0.19    0.04	Depth to	    1.00  0.39
633F: Pence	  Very limited   Slope 	    1.00   	  Very limited   Slope 	    1.00   	  Very limited   Slope   Content of large   stones   Gravel content	  1.00  0.01    0.01
Padus	  Very limited   Slope 	    1.00 	  Very limited   Slope 	    1.00 	  Very limited   Slope   Gravel content	  1.00  0.02
648B: Sconsin	  Somewhat limited   Depth to   saturated zone	    0.98   	  Somewhat limited   Depth to   saturated zone		Somewhat limited   Depth to   saturated zone   Slope	0.98
670C: Keweenaw	  Somewhat limited   Slope 	    0.37 	  Somewhat limited   Slope 	    0.37 	  Very limited   Slope   Content of large   stones	  1.00  0.01
Pence	  Somewhat limited   Slope   	    0.37   	  Somewhat limited   Slope 	    0.37     	   Very limited   Slope   Content of large   stones   Gravel content	į
670E: Keweenaw	  Very limited   Slope 	      1.00 	  Very limited   Slope 	      1.00	  Very limited   Slope   Content of large   stones	    1.00  0.01
Pence	  Very limited   Slope   	    1.00     	  Very limited   Slope   	    1.00     	   Very limited   Slope   Content of large   stones   Gravel content	  1.00  0.05    0.01
671B: Spoonerhill, stony	   Somewhat limited   Depth to   saturated zone   Restricted   permeability	    0.39    0.21     	   Somewhat limited   Restricted   permeability   Depth to   saturated zone	    0.21    0.19       	Depth to	   0.50   0.39   0.21   0.05   0.05

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas   		Picnic areas		Playgrounds   	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	1	limiting features	1	limiting features	1
671B:	[		 		 	
Spoonerhill	Somewhat limited	j	Somewhat limited	į	Somewhat limited	j
	Depth to	0.39	Restricted	0.21	Slope	0.50
	saturated zone		permeability		Depth to	0.39
	Restricted	0.21	Depth to	0.19	saturated zone	
	permeability		saturated zone		Restricted	0.21
	 		 	1	permeability Gravel content	0.02
		1	 	1	Content of large	
					stones	
COOD.						
680B: Stanberry, stony	  Somewhat limited		  Somewhat limited		  Somewhat limited	
	Too stony	0.50	Too stony	0.50	Slope	0.50
	Depth to	0.39	Restricted	0.21	Too stony	0.50
	saturated zone		permeability		Depth to	0.39
	Restricted	0.21	Depth to	0.19	saturated zone	
	permeability	ļ	saturated zone	ļ	Restricted	0.21
					permeability	
			 		Content of large   stones	
Pence, stony	  Somewhat limited		  Somewhat limited		  Somewhat limited	
rence, scony	Too stony	0.50	Too stony	0.50	Slope	0.50
					Too stony	0.50
	İ	İ	İ	į	Content of large	0.01
					stones	
			 		Gravel content	0.01
683A:						
Tipler	Not limited		Not limited		Somewhat limited	
	 		 		Gravel content	0.02
706A:						
Winterfield			Very limited	1	Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	1.00	saturated zone Flooding	0.40	saturated zone	1.00
	Fiooding		Flooding		Fiduling	
Totagatic	Very limited	j	Very limited	į	Very limited	j
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Flooding	1.00	Ponding	1.00	-	1.00
	Ponding	1.00	Flooding 	0.40	Ponding 	1.00
724A:						1
Rib	· -		Very limited	1	Very limited	1 00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
Rock outcrop	  Not rated		  Not rated		  Not rated	
-	į	į	į	į	į	į
726B: Sissabagama			  Somewhat limited		  Somewhat limited	
bissabayama	Too sandy	0.81	Too sandy	0.81	Too sandy	0.81
					Slope	0.12

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features		limiting features	
733A:		1				
Wozny	Very limited		Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	1 00	saturated zone	1 00	saturated zone	1.00
	Ponding   Too stony	1.00	!	1.00	Ponding	0.50
	Restricted	0.30	Too stony Restricted	0.50 0.21	Too stony Restricted	0.21
	permeability	0.21	permeability	0.21	permeability	0.21
		į		į		į
771A: Lenroot	Somewhat limited		  Somewhat limited		  Somewhat limited	
Henroot	Too sandy	0.72	Too sandy	0.72	Too sandy	0.72
	Depth to	0.39	Depth to	0.19	Depth to	0.39
	saturated zone	10.33	saturated zone	10.15	saturated zone	0.33
	sacuraced zone	1	saturated zone		Gravel content	0.06
			 	l I	Graver concent	0.00
827A:		i	İ	j		i
Scoba	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to	0.39	Depth to	0.19	Depth to	0.39
	saturated zone		saturated zone		saturated zone	
		1		ļ	Gravel content	0.04
853C:			 	 		1
Frogcreek	  Verv limited	i	  Very limited		  Very limited	i
5	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	i	saturated zone	i	saturated zone	i
	Too stony	0.50	Too stony	0.50	Slope	1.00
	Restricted	0.21	Restricted	0.21	Too stony	0.50
	permeability	i	permeability	i	Restricted	0.21
		į		į	permeability	į
Stinnett	 		  Very limited		  Very limited	
BCIMIECC	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	1	saturated zone	1	saturated zone	1
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Restricted	0.21	Restricted	0.21	Restricted	0.21
	permeability		permeability		permeability	
Wozny	_	1	Very limited	1	Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	1 00	saturated zone	1 00	saturated zone	1 00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Too stony   Restricted	0.50		0.50		0.50
		0.21	Restricted	0.21	!	0.21
	permeability		permeability		permeability	
856B:		İ				i
Stinnett	Very limited		Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
			I make a second	0.50		0 50
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Too stony Restricted	0.50	Too stony   Restricted	0.21	Restricted	0.30

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		   Playgrounds 	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
857B: Frogcreek	  Very limited   Depth to   saturated zone   Too stony   Restricted   permeability	    1.00    0.50  0.21	  Very limited   Depth to   saturated zone   Too stony   Restricted   permeability	    1.00    0.50  0.21	  Very limited   Depth to   saturated zone   Slope   Too stony   Restricted   permeability	    1.00    0.50  0.50  0.21
857C: Frogcreek	  Very limited   Depth to   saturated zone   Too stony   Restricted   permeability   Slope	   1.00   0.50   0.21   0.16	  Very limited   Depth to   saturated zone   Too stony   Restricted   permeability   Slope	    1.00    0.50  0.21    0.16	  Very limited   Depth to   saturated zone   Slope   Too stony   Restricted   permeability	    1.00    1.00  0.50  0.21
873B: Stanberry	Somewhat limited   Too stony   Depth to   saturated zone   Restricted   permeability	  0.50  0.39    0.21 	Somewhat limited   Too stony   Restricted   permeability   Depth to   saturated zone	  0.50  0.21    0.19 	Somewhat limited   Slope   Too stony   Depth to   saturated zone   Restricted   permeability   Content of large   stones	  0.50  0.50  0.39    0.21 
873C: Stanberry	Somewhat limited   Too stony   Depth to   saturated zone   Slope   Restricted   permeability	    0.50  0.39    0.37  0.21	Somewhat limited   Too stony   Slope   Restricted   permeability   Depth to   saturated zone	    0.50  0.37  0.21    0.19		  1.00  0.50  0.39    0.21 
873D: Stanberry		   1.00   0.50   0.39     0.21	Very limited   Slope   Too stony   Restricted   permeability   Depth to   saturated zone	   1.00   0.50   0.21   0.19	Very limited   Slope   Too stony   Depth to   saturated zone   Restricted   permeability   Content of large   stones	   1.00  0.50  0.39   0.21   0.01
905A: Cublake	  Somewhat limited   Too sandy   	      0.50 	  Somewhat limited   Too sandy   	    0.50 	  Somewhat limited   Too sandy   Gravel content	  0.50  0.06
926A: Flink	  Very limited   Depth to   saturated zone   Too sandy	  1.00    0.50	  Very limited   Depth to   saturated zone   Too sandy	  1.00    0.50	  Very limited   Depth to   saturated zone   Too sandy	  1.00    0.50

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		   Picnic areas   		   Playgrounds 	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
943D:	 		 	 	 	
Stanberry	  Very limited	i	  Very limited		  Very limited	i
-	Slope	1.00	_	1.00	Slope	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Depth to	0.39	!	0.21	Depth to	0.39
	saturated zone		permeability		saturated zone	
	Restricted	0.21	Depth to saturated zone	0.19		0.21
	permeability	I	saturated zone	l I	permeability Content of large	10.01
					stones	
	İ	İ	İ	İ	İ	İ
Greenwood	· -	1	Very limited	:	Very limited	11 00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	!	1.00	!	1.00
948A:	İ	İ	İ	İ	İ	İ
Billyboy	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to	0.98	Depth to	0.75	-	0.98
	saturated zone		saturated zone	 	saturated zone	1
770C:					 	
Keweenaw	Somewhat limited	İ	Somewhat limited	j	Very limited	İ
	Slope	0.37	Slope	0.37	Slope	1.00
	!				Content of large	0.01
	l I		 		stones	
Pence	  Somewhat limited		  Somewhat limited	 	  Very limited	
	Too stony	0.50	Too stony	0.50	Slope	1.00
	Slope	0.37	Slope	0.37	Too stony	0.50
					Content of large	0.01
		!		ļ	stones	
	l I		 		Gravel content	0.01
Greenwood	  Not rated		  Not rated		  Not rated	
	į	į		į		į
970E: Keweenaw	  Vorus limited		  Very limited		  Very limited	
reweellaw	Slope	1.00	Slope	1.00	Slope	1.00
	blope		blope		Content of large	
		į		İ	stones	
_						
Pence			Very limited		Very limited	
	Slope Too stony	1.00	Slope Too stony	1.00  0.50	Slope   Too stony	1.00
	100 scony		100 scony	0.30	Content of large	0.01
		i			stones	
	İ	į		İ	Gravel content	0.01
<b>G</b>			 		 	
Greenwood	NOC Tated		Not rated 	 	Not rated 	
L070C:	į	İ				
Fremstadt	Somewhat limited	1	Somewhat limited		Very limited	]
	Slope	0.16	Slope	0.16	Slope	1.00
			 	 	Gravel content	0.43
Cress	  Somewhat limited		  Somewhat limited	 	  Very limited	
		1		I .	1 2	1
	Slope	0.04	Slope	0.04	Slope	1.00

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds 	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
1070D: Fremstadt	  Very limited   Slope 	      1.00	  Very limited   Slope 	      1.00	  Very limited   Slope   Gravel content	  1.00  0.43
Cress	  Very limited   Slope	1.00	  Very limited   Slope	    1.00	  Very limited   Slope	1.00
1080B: Spoonerhill	  Somewhat limited   Depth to   saturated zone   Restricted   permeability	    0.39    0.21   	  Somewhat limited   Restricted   permeability   Depth to   saturated zone	    0.21    0.19     	Somewhat limited   Slope   Depth to   saturated zone   Restricted   permeability   Gravel content   Content of large   stones	    0.50  0.39    0.21    0.02  0.01
Spoonerhill, stony	Somewhat limited   Depth to   saturated zone   Restricted   permeability	  0.39    0.21   	Somewhat limited   Restricted   permeability   Depth to   saturated zone	  0.21  0.19  0.19   	Somewhat limited   Slope   Depth to   saturated zone   Restricted   permeability   Content of large   stones   Gravel content	  0.50  0.39    0.21    0.05 
Cress	  Not limited 		  Not limited 	   	  Somewhat limited   Slope	    0.12
16526						
1653C: Stanberry	Somewhat limited   Too stony   Depth to   saturated zone   Restricted   permeability   Slope	  0.50  0.39    0.21    0.04	Somewhat limited   Too stony   Restricted   permeability   Depth to   saturated zone   Slope	  0.50  0.21    0.19    0.04	Very limited   Slope   Too stony   Depth to   saturated zone   Restricted   permeability   Content of large   stones	  1.00  0.50  0.39    0.21    0.01
Parkfalls		  1.00    0.50  0.21 	   Very limited   Depth to   saturated zone   Too stony   Restricted   permeability	  1.00    0.50  0.21 	Very limited   Depth to   saturated zone   Too stony   Restricted   permeability   Content of large   stones	  1.00    0.50  0.21    0.01
Wozny	Very limited   Depth to   saturated zone   Ponding   Too stony   Restricted   permeability	  1.00    1.00  0.50  0.21 	Very limited Depth to saturated zone Ponding Too stony Restricted permeability	  1.00    1.00  0.50  0.21	Very limited Depth to saturated zone Ponding Too stony Restricted permeability	  1.00    1.00  0.50  0.21 

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
2015:						
Pits	  Not rated 	   	  Not rated 	   	  Not rated 	
2050: Landfill	    Not rated	<u> </u> 	    Not rated	<u> </u> 	  Not rated	
3011A: Barronett	  Very limited   Depth to   saturated zone   Ponding   Restricted	  1.00    1.00  0.21	saturated zone Ponding	  1.00    1.00  0.21	   Very limited   Depth to   saturated zone   Ponding   Restricted	  1.00    1.00  0.21
	permeability		permeability		permeability	
3125A: Meehan	  Very limited   Depth to   saturated zone   Too sandy	    1.00    0.81	  Very limited   Depth to   saturated zone   Too sandy	    1.00    0.81	  Very limited   Depth to   saturated zone   Too sandy	    1.00    0.81
3126A:	 		 	 	 	
Wurtsmith	Somewhat limited   Too sandy   Depth to   saturated zone	0.60	Somewhat limited Too sandy Depth to saturated zone	  0.60  0.19 	Somewhat limited Too sandy Depth to saturated zone Gravel content	0.60
3276A:			 		 	
Au Gres	Very limited   Depth to   saturated zone	  1.00 	Very limited   Depth to   saturated zone	  1.00 	Very limited   Depth to   saturated zone	  1.00 
3312B: Glendenning, very stony	      Very limited		      Very limited	     	      Very limited	
-	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too stony   Restricted   permeability 	0.50  0.21   	Too stony Restricted permeability	0.50  0.21   		0.50   0.21     0.05   0.03
Glendenning	  Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	1.00
	Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability Gravel content Content of large stones	0.21
3336A: Fenander	    Very limited		    Very limited	   	    Very limited	
	Depth to saturated zone Ponding	1.00	: -	1.00    1.00	: -	1.00    1.00
	Restricted   permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u>i</u>	limiting features	<u> </u>	limiting features	<u>i</u>
3403A:	 		 	 	 	
Loxley	  Verv limited		  Very limited		  Very limited	
•	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	İ	saturated zone	i
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter		organic matter		organic matter	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
Beseman	  Verv limited		  Very limited	 	  Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	i	saturated zone		saturated zone	i
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter	İ	organic matter	İ	organic matter	İ
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Restricted	0.21	Restricted	0.21	Restricted	0.21
	permeability		permeability		permeability	
Dawson	  Very limited		  Very limited		  Very limited	
Danbon	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	İ		İ	ĺ	İ	ĺ
424C:						
Frogcreek	! <del>-</del>		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too stony	0.50	Too stony	0.50	Slope	1.00
	Restricted	0.21	Restricted	0.21	Too stony	0.50
	permeability		permeability		Restricted	0.21
		İ	<u> </u>		permeability	İ
V			 			
Magroc	very limited   Depth to	1.00	Very limited   Depth to	1.00	Very limited   Depth to	1.00
	saturated zone	1	saturated zone	1	saturated zone	1
	Too stony	0.50	Too stony	0.50	Too stony	0.50
					Content of large	
		i		i	stones	i
	İ	j	İ	İ	Gravel content	0.02
Stinnett	Very limited   Depth to	1.00	Very limited   Depth to	1.00	Very limited   Depth to	1.00
	saturated zone	1	saturated zone	1	saturated zone	1
	Too stony	0.50	Too stony	0.50	!	0.50
	Restricted	0.21	Restricted	0.21	Restricted	0.21
	permeability		permeability		permeability	İ
Rock outcrop	  Not rated		  Not rated		  Not rated	
446A:	 		 	 	 	1
Newson	  Very limited		  Very limited		  Very limited	i
	Depth to	1.00		1.00	: -	1.00
	saturated zone	İ	saturated zone	ĺ	saturated zone	İ
	Ponding	1.00	Ponding	1.00	Ponding	1.00
4400.	 		 			
448B: Grettum	  Somewhat limited	 	  Somewhat limited	 	  Somewhat limited	 
01000um	Too sandy	0.81	Too sandy	0.81	Too sandy	0.81
					Slope	0.12
	i I	i	i I	i	1 <del></del>	1

Table 16a.--Recreational Development--Continued

Map symbol	Camp areas		Picnic areas		Playgrounds	
and soil name			 			
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	
3448C:	 		 		 	
Grettum	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.81	Too sandy	0.81	Slope	1.00
	Slope	0.04	Slope	0.04	Too sandy	0.81
3516A:					 	
Slimlake	Not limited		Not limited		Not limited	
3629B:						
Perida	Somewhat limited	ĺ	Somewhat limited	İ	Somewhat limited	Ì
	Too sandy	0.81	Too sandy	0.81	Too sandy	0.81
M-W:	 				 	
Miscellaneous water	Not rated		Not rated		Not rated	
W:			[ 			
Water	Not rated		Not rated		Not rated	1

Table 16b.--Recreational Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways   	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Valu
BA:	 		 	 	 	l I
Totagatic	  Very limited	İ	  Very limited	İ	  Very limited	İ
	Depth to	1.00	Depth to	1.00	Flooding	1.00
	saturated zone	İ	saturated zone	İ	Depth to	1.00
	Ponding	1.00	Ponding	1.00	saturated zone	
	Flooding	0.40	Flooding	0.40	Ponding	1.00
Bowstring	  Very limited		  Very limited		  Very limited	
	Depth to	1.00	Depth to	1.00	Flooding	1.00
	saturated zone		saturated zone		Content of	1.00
	Content of	1.00	Content of	1.00	organic matter	
	organic matter		organic matter		Depth to	1.00
	Ponding	1.00	Ponding	1.00	saturated zone	
	Flooding	0.40	Flooding	0.40	Ponding	1.00
Ausable	  Very limited		  Very limited		  Very limited	
	Depth to	1.00	Depth to	1.00	Flooding	1.00
	saturated zone		saturated zone		Depth to	1.00
	Ponding	1.00	Ponding	1.00	saturated zone	
	Flooding	0.40	Flooding	0.40	Ponding	1.00
2A:	 				 	
Comstock	Very limited	İ	Very limited	İ	Very limited	ĺ
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
4A:						
Poskin	Very limited		Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	 	saturated zone	
7A:					 	
Scott Lake	Not limited		Not limited		Somewhat limited	
	l		 		Droughty	0.01
8B:						
Haugen, very stony	Somewhat limited		Somewhat limited		Somewhat limited	
	Too stony	0.50	Too stony	0.50	Depth to	0.19
					saturated zone	
					Content of large	0.03
	 				stones	
Haugen	  Not limited		  Not limited		  Somewhat limited	i
					Depth to	0.19
					saturated zone	
	 				Content of large   stones	0.03
						į
Rosholt, very stony		!	Somewhat limited	:	Somewhat limited	
	Too stony	0.50	Too stony	0.50	Droughty	0.02
					Content of large	0.01
		1	1	1	stones	1

Table 16b.--Recreational Development--Continued

Map symbol and soil name	   Paths and trail   	s	   Off-road   motorcycle trai	ls	Golf fairways	
	Rating class and	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
28B: Rosholt	    Not limited   	       	    Not limited   	       	    Somewhat limited   Droughty 	
28C: Haugen, very stony	•	    0.50     	  Somewhat limited   Too stony   	    0.50     	Somewhat limited   Depth to   saturated zone   Slope   Content of large   stones	  0.19    0.04  0.03
Haugen	  Not limited       	           	  Not limited       	           	Somewhat limited   Depth to   saturated zone   Slope   Content of large   stones	0.04
Rosholt, very stony	•	    0.50   	  Somewhat limited   Too stony 	    0.50   	Somewhat limited   Slope   Droughty   Content of large   stones	  0.04  0.02  0.01
Rosholt	  Not limited   	     	  Not limited   	     	  Somewhat limited   Slope   Droughty	0.04
33B: Chetek	  Not limited   	         	  Not limited   	         	  Somewhat limited   Droughty   Content of large   stones	  0.61  0.01
33C: Chetek	  Not limited 	         	  Not limited 	         	  Somewhat limited   Droughty   Slope   Content of large   stones	  0.61  0.04  0.01
38A: Rosholt	    Not limited 	     	    Not limited 	     	    Somewhat limited   Droughty	0.01
38B: Rosholt	    Not limited 	       	    Not limited   	       	    Somewhat limited   Droughty	0.01
38C: Rosholt	  Not limited  - 	         	  Not limited 	       	  Somewhat limited   Slope   Droughty	  0.04  0.01
38D: Rosholt	  Somewhat limited   Slope 	    0.02 	  Not limited   	         	  Very limited   Slope   Droughty	1.00

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trai	ls	   Golf fairways 	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	<u> </u>	limiting features	<u> </u>
42D: Amery	  Somewhat limited   Too stony   Slope	    0.50  0.02	  Somewhat limited   Too stony 	      0.50   	  Very limited   Slope   Content of large   stones	    1.00  0.03
43B: Antigo	    Not limited 	     	    Not limited 	     	    Not limited 	     
43C: Antigo	  Very limited   Water erosion	    1.00	  Very limited   Water erosion	    1.00	  Somewhat limited   Slope	0.37
43D: Antigo	  Very limited   Water erosion   Slope	    1.00  0.92	  Very limited   Water erosion	    1.00	  Very limited   Slope	    1.00
48A: Brill	  Somewhat limited   Depth to   saturated zone	      0.44 	  Somewhat limited   Depth to   saturated zone	      0.44 	  Somewhat limited   Depth to   saturated zone	    0.75
63A: Crystal Lake	  Not limited     	       	  Not limited   	       	  Somewhat limited   Depth to   saturated zone	    0.19 
63B: Crystal Lake	  Not limited   	       	  Not limited 	       	  Somewhat limited   Depth to   saturated zone	    0.19 
63C: Crystal Lake	  Very limited   Water erosion	    1.00 	  Very limited   Water erosion	    1.00   	  Somewhat limited   Depth to   saturated zone   Slope	    0.19    0.04
63E: Crystal Lake	  Very limited   Water erosion   Slope	    1.00  1.00	  Very limited   Water erosion   Slope	    1.00  0.08	  Very limited   Slope 	    1.00 
64A: Totagatic	  Very limited   Depth to   saturated zone   Ponding   Flooding	  1.00    1.00  0.40	   Very limited   Depth to   saturated zone   Ponding   Flooding	  1.00    1.00  0.40	  Very limited   Flooding   Depth to   saturated zone   Ponding	  1.00  1.00    1.00
Winterfield	   Very limited   Depth to   saturated zone   Too sandy   Flooding	  1.00    0.79  0.40	   Very limited   Depth to   saturated zone   Too sandy   Flooding	  1.00    0.79  0.40	•	  1.00  1.00    0.50

Table 16b.--Recreational Development--Continued

Map symbol and soil name	   Paths and trail 	s	Off-road motorcycle trai	ls	Golf fairways	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
69B: Keweenaw	  Somewhat limited   Too sandy 	      0.76 	  Somewhat limited   Too sandy 	      0.76 	  Somewhat limited   Droughty   Content of large   stones	    0.06  0.01
Sayner	  Somewhat limited   Too sandy   	    0.87   	  Somewhat limited   Too sandy   	    0.87   	  Somewhat limited   Droughty   Content of large   stones	  0.94  0.05
Vilas	  Somewhat limited   Too sandy 	    0.87 	  Somewhat limited   Too sandy 	    0.87	  Somewhat limited   Droughty 	    0.42
69C: Keweenaw	  Somewhat limited   Too sandy   	    0.76   	  Somewhat limited   Too sandy   	    0.76   	Somewhat limited   Slope   Droughty   Content of large   stones	  0.16  0.06  0.01
Sayner	!	    0.87     	  Somewhat limited   Too sandy 	    0.87     		  0.94  0.16  0.05
Vilas	  Somewhat limited   Too sandy 	    0.87 	  Somewhat limited   Too sandy 	  0.87 	  Somewhat limited   Droughty   Slope	0.42
69E: Keweenaw	  Very limited   Slope   Too sandy 	    1.00  0.76 	  Somewhat limited   Too sandy   Slope 	    0.76  0.22 	  Very limited   Slope   Droughty   Content of large   stones	  1.00  0.06  0.01
Sayner	  Very limited   Slope   Too sandy 	  1.00  0.87 	  Somewhat limited   Too sandy   Slope 	  0.87  0.22 	Very limited   Slope   Droughty   Content of large   stones	  1.00  0.94  0.05
Vilas	  Very limited   Slope   Too sandy	    1.00  0.87	· -	    0.87  0.22	: -	1.00
74B: Vilas	  Somewhat limited   Too sandy 	      0.87	  Somewhat limited   Too sandy 	      0.87	  Somewhat limited   Droughty 	0.42
74C: Vilas	  Somewhat limited   Too sandy 	    0.87 	  Somewhat limited   Too sandy 	    0.87 	  Somewhat limited   Droughty   Slope	  0.42  0.37
74D: Vilas	  Somewhat limited   Slope   Too sandy	      0.92  0.87	  Somewhat limited   Too sandy 	      0.87 	  Very limited   Slope   Droughty	  1.00  0.42

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	.s	Off-road   motorcycle trai	ls	   Golf fairways   	3
	Rating class and limiting features	Value	Rating class and limiting features		Rating class and   limiting features	Value
100B: Menahga	    Very limited   Too sandy 	      1.00	    Very limited   Too sandy 	      1.00	  Somewhat limited   Droughty   Too sandy	      0.93  0.50
100C: Menahga	    Not limited   		    Not limited   	     	  Somewhat limited   Droughty   Slope	    0.51  0.04
100D: Menahga	  Somewhat limited   Slope 	0.68	  Not limited   		  Very limited   Slope   Droughty	    1.00  0.51
127D: Amery	  Somewhat limited   Too stony   Slope	0.50	  Somewhat limited   Too stony 	    0.50 	  Very limited   Slope   Content of large   stones	  1.00  0.03
Rosholt	  Somewhat limited   Too stony   Slope 	  0.50  0.02 	  Somewhat limited   Too stony 	  0.50   	  Very limited   Slope   Droughty   Content of large   stones	  1.00  0.02  0.01
127E: Amery	  Very limited   Slope   Too stony	  1.00  0.50	<u>-</u>	  0.56  0.50	:	  1.00  0.03
Rosholt	  Very limited   Slope   Too stony 	  1.00  0.50 	  Somewhat limited   Slope   Too stony	  0.56  0.50 	:	  1.00  0.02  0.01
156B: Magnor, very stony	  Very limited   Depth to   saturated zone   Too stony	  1.00    0.50	  Very limited   Depth to   saturated zone   Too stony	    1.00    0.50	saturated zone	  1.00    0.01
Magnor	  Very limited   Depth to   saturated zone 	1.00	  Very limited   Depth to   saturated zone	  1.00 	  Very limited   Depth to   saturated zone	    1.00 
157B: Freeon, very stony	  Very limited   Depth to   saturated zone   Too stony	1.00	saturated zone	  1.00    0.50	  Very limited   Depth to   saturated zone	1.00
Freeon	  Very limited   Depth to   saturated zone	1.00	  Very limited   Depth to   saturated zone	  1.00   	   Very limited   Depth to   saturated zone   Content of large   stones	  1.00    0.01

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	Off-road motorcycle trai	ls	Golf fairways		
		Value		Value	Rating class and	Value
	limiting features		limiting features	1	limiting features	1
157C:	 		 		 	
Freeon, very stony	Very limited	j	Very limited	İ	Very limited	İ
	Depth to	1.00	-	1.00	: -	1.00
	saturated zone		saturated zone		saturated zone	
	Water erosion   Too stony	1.00  0.50	!	1.00  0.50	Slope 	0.04
	į -	İ	į -	İ	İ	İ
Freeon	: -		Very limited	1	Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Water erosion	1.00	!	1.00	Slope	0.04
					Content of large	1
	į	İ		İ	stones	
160A:	 		 		 	1
Oesterle	  Very limited	İ	  Very limited	İ	  Very limited	i
	Depth to	1.00		1.00		1.00
	saturated zone	l i	saturated zone	l i	saturated zone	
182B:	 		 		 	
Padus	Not limited		Not limited	İ	Not limited	
182C:	 		 	 	 	
Padus	Not limited	j	Not limited	j	Somewhat limited	i
					Slope	0.37
192A:	 	 		 		1
Worcester	Very limited	İ	Very limited	İ	Very limited	İ
	Depth to	1.00	-	1.00	: -	1.00
	saturated zone	 	saturated zone	 	saturated zone	l I
193A:	İ	İ		İ	İ	İ
Minocqua	: -		Very limited	:	Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	!	1.00	!	1.00
215B: Pence	  Not limited	 	  Not limited	 	  Somewhat limited	1
		İ		İ	Droughty	0.30
					Content of large	0.01
	 	l I	 	l I	stones	
215C:						
Pence	Not limited		Not limited		Somewhat limited	ļ
					Slope	0.37
	 	 	 	 	Droughty Content of large	0.30
					stones	
215D:	l I		 		 	1
Pence	  Somewhat limited		  Not limited		  Very limited	
	Slope	0.92			Slope	1.00
					Droughty	0.30
	 		 	 	Content of large   stones	0.01
	!	!	I	1	a cones	1

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	Off-road motorcycle trai	Off-road motorcycle trails		Golf fairways   	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
315A: Rib	   Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	saturated zone	    1.00    1.00	saturated zone	    1.00    1.00
337A: Plover	  Very limited   Depth to   saturated zone	      1.00	  Very limited   Depth to   saturated zone	      1.00	Very limited Depth to saturated zone	      1.00
368B: Mahtomedi	  Somewhat limited   Too sandy	      0.72	  Somewhat limited   Too sandy	      0.72	  Very limited   Droughty	1.00
Cress	  Not limited 	   	  Not limited 	 	  Somewhat limited   Droughty	0.13
368C: Mahtomedi	    Somewhat limited   Too sandy 	      0.72	    Somewhat limited   Too sandy 	      0.72	    Very limited   Droughty   Slope	    1.00  0.04
Cress	  Not limited   	     	  Not limited   	       	  Somewhat limited   Droughty   Slope	  0.13  0.04
368D: Mahtomedi	  Somewhat limited   Too sandy   Slope	    0.72  0.50	  Somewhat limited   Too sandy	      0.72	  Very limited   Slope   Droughty	  1.00  1.00
Cress	  Somewhat limited   Slope   	    0.50 	  Not limited   	       	  Very limited   Slope   Droughty 	  1.00  0.13
371A: Croswell	  Somewhat limited   Too sandy 	    0.87   	  Somewhat limited   Too sandy 	    0.87   	  Somewhat limited   Droughty   Depth to   saturated zone	  0.54  0.19 
380B: Cress	  Not limited 	   	  Not limited 	   	  Somewhat limited   Droughty	    0.13
Rosholt	  Not limited   	     	  Not limited   	     	  Somewhat limited   Droughty 	    0.01
380C: Cress	Not limited	     	  Not limited 	     	  Somewhat limited   Droughty   Slope	0.13
Rosholt	  Not limited     	       	  Not limited     	       	  Somewhat limited   Slope   Droughty 	  0.04  0.01

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways   	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
380D: Cress	    Somewhat limited   Slope 	      0.68	    Not limited   	       	    Very limited   Slope   Droughty	      1.00  0.13
Rosholt	  Somewhat limited   Slope 	    0.68 	  Not limited   	     	  Very limited   Slope   Droughty	  1.00  0.01
383B: Mahtomedi	    Somewhat limited   Too sandy 	      0.72	    Somewhat limited   Too sandy 	      0.72	    Very limited   Droughty 	      1.00
383C: Mahtomedi	  Somewhat limited   Too sandy	    0.72	  Somewhat limited   Too sandy	0.72	  Very limited   Droughty   Slope	1.00
383D: Mahtomedi	  Somewhat limited   Too sandy   Slope	      0.72  0.68	  Somewhat limited   Too sandy 	      0.72 	  Very limited   Slope   Droughty	    1.00  1.00
396B: Friendship	  Very limited   Too sandy	    1.00	  Very limited   Too sandy	    1.00	Somewhat limited   Droughty   Too sandy	  0.91  0.50
Wurtsmith	  Very limited   Too sandy     	    1.00   	  Very limited   Too sandy   	    1.00   	Somewhat limited   Droughty   Too sandy   Depth to   saturated zone	  0.87  0.50  0.19
Grayling	  Very limited   Too sandy 	    1.00 	  Very limited   Too sandy 	    1.00 	  Very limited   Droughty   Too sandy	  1.00  0.50
397A: Perchlake	  Very limited   Depth to   saturated zone   Too sandy	    1.00    0.96	  Very limited   Depth to   saturated zone   Too sandy	    1.00    0.96	  Very limited   Depth to   saturated zone   Droughty	  1.00    0.36
399B: Grayling	  Very limited   Too sandy 	    1.00 	  Very limited   Too sandy 	    1.00 	  Very limited   Droughty   Too sandy	  1.00  0.50
399C: Grayling	  Very limited   Too sandy 	      1.00   	  Very limited   Too sandy 	      1.00   	  Very limited   Droughty   Too sandy   Slope	    1.00  0.50  0.04
399D: Grayling	  Very limited   Too sandy   Slope	    1.00  0.68	  Very limited   Too sandy 	    1.00 	  Very limited   Droughty   Slope   Too sandy	  1.00  1.00  0.50

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways   	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	l	limiting features	<u> </u>	limiting features	<u> </u>
405A:	 		 		 	i
Lupton	  Very limited	i	  Very limited	İ	  Very limited	i
-	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone	İ	saturated zone	İ	organic matter	i
	Content of	1.00	Content of	1.00	Depth to	1.00
	organic matter		organic matter		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
		ļ				!
Cathro	Very limited	1	Very limited	:	Very limited	
	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone	1 00	saturated zone	1 00	organic matter	1 00
	Content of organic matter	1.00	Content of organic matter	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
					101141119	
Tawas	  Very limited	İ	  Very limited	İ	  Very limited	i
	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone	İ	saturated zone	İ	organic matter	i
	Content of	1.00	Content of	1.00	Depth to	1.00
	organic matter		organic matter		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
406A:		ļ				!
Loxley	Very limited		Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone Content of	1.00	saturated zone Content of	1.00	organic matter	1.00
	organic matter	1	organic matter	1	Depth to saturated zone	1
	Ponding	1.00	Ponding	1.00	Ponding	1.00
407A:		į		İ		į
Seelyeville	Very limited	ĺ	Very limited	İ	Very limited	İ
	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone		saturated zone		organic matter	
	Content of	1.00	Content of	1.00	Depth to	1.00
	organic matter		organic matter		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
Markey	  Very limited	1	  Very limited	 	  Very limited	1
Markey	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone		saturated zone		organic matter	
	Content of	1.00	Content of	1.00	Depth to	1.00
	organic matter	İ	organic matter	į	saturated zone	į
	Ponding	1.00	Ponding	1.00	Ponding	1.00
410A:						!
Seelyeville			Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone Content of	1.00	saturated zone Content of	1 00	organic matter	1.00
	organic matter	<b>1.00</b>	organic matter	1.00	Depth to saturated zone	1
	Ponding	1.00	Ponding	1.00	Ponding	1.00
			<b>-</b>			
	  Very limited	İ	  Very limited	İ	  Very limited	i
Cathro		1.00	Depth to	1.00	Content of	1.00
Cathro	Depth to	1				
Cathro	saturated zone		saturated zone		organic matter	
Cathro	saturated zone Content of	1.00	Content of	  1.00	Depth to	1.00
Cathro	saturated zone	į	!	  1.00    1.00		  1.00    1.00

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways   	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
412A: Rifle	  Very limited   Depth to   saturated zone   Ponding	      1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	1.00
Tacoosh	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	   Very limited   Depth to   saturated zone   Ponding	  1.00    1.00
415A: Greenwood	  Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	   Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	Very limited   Content of   organic matter   Depth to   saturated zone   Ponding	  1.00    1.00    1.00
439B: Graycalm	    Somewhat limited   Too sandy	0.30	    Somewhat limited   Too sandy	      0.30	  Somewhat limited   Droughty	0.29
Menahga	  Not limited 		  Not limited 	   	  Somewhat limited   Droughty	0.49
439C: Graycalm	  Somewhat limited   Too sandy 	      0.30	  Somewhat limited   Too sandy 	      0.30	  Somewhat limited   Droughty   Slope	0.29
Menahga	  Not limited   	     	  Not limited   	     	Somewhat limited   Droughty   Slope	0.49
439D: Graycalm	  Somewhat limited   Slope   Too sandy	0.68	  Somewhat limited   Too sandy 	      0.30	  Very limited   Slope   Droughty	1.00
Menahga	  Somewhat limited   Slope 	    0.68 	  Not limited     	       	  Very limited   Slope   Droughty	1.00
441C: Freeon	  Very limited   Depth to   saturated zone   Water erosion   Too stony		saturated zone Water erosion	  1.00    1.00  0.50	  Very limited   Depth to   saturated zone   Slope	  1.00    0.37
Cathro	  Not rated 	   	  Not rated 	   	  Not rated 	   
442C: Haugen	  Somewhat limited   Too stony   	  0.50     	  Somewhat limited   Too stony   	    0.50     	Somewhat limited   Depth to   saturated zone   Content of large   stones	  0.19    0.03

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trails		Golf fairways	
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
442C: Greenwood		      1.00 	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	      1.00    1.00
443D:	[ ]		[ ]		[ 	
Amery	Very limited   Slope   Too stony	  1.00  0.50	Somewhat limited   Too stony 	  0.50 	Very limited   Slope   Content of large   stones	  1.00  0.03
Greenwood	   Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	   Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	1.00
461A:	 		 		 	
Bowstring	Very limited   Depth to   saturated zone   Content of	  1.00    1.00	Very limited   Depth to   saturated zone   Content of	  1.00    1.00	Content of	  1.00  1.00
	organic matter Ponding Flooding	1.00	organic matter Ponding Flooding	  1.00  0.40	!	1.00
484A:						
Greenwood	Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	Very limited   Depth to   saturated zone   Ponding	  1.00    1.00
Beseman	  Very limited   Depth to   saturated zone   Content of	    1.00    1.00	  Very limited   Depth to   saturated zone   Content of	    1.00    1.00	  Very limited	  1.00    1.00
	organic matter Ponding	1.00	organic matter Ponding	1.00	saturated zone Ponding	1.00
495B: Karlsborg	  Somewhat limited   Too sandy   Depth to   saturated zone	  0.81  0.44	  Somewhat limited   Too sandy   Depth to   saturated zone	  0.81  0.44	  Somewhat limited   Depth to   saturated zone   Droughty	  0.75    0.26
Grettum	  Somewhat limited   Too sandy	0.81	  Somewhat limited   Too sandy	    0.81	  Somewhat limited   Droughty	0.61
Perida	  Somewhat limited   Too sandy	    0.81	  Somewhat limited   Too sandy	    0.81	  Somewhat limited   Droughty 	0.44
495C: Karlsborg	  Somewhat limited   Too sandy   Depth to   saturated zone	    0.81  0.44 	  Somewhat limited   Too sandy   Depth to   saturated zone	:	  Somewhat limited   Depth to   saturated zone   Droughty   Slope	  0.75    0.26  0.04

Table 16b.--Recreational Development--Continued

Map symbol and soil name	   Paths and trail   	s	Off-road   motorcycle trai	ls	Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
495C:	 		 		 	 
Grettum	Somewhat limited   Too sandy	0.81	Somewhat limited   Too sandy	0.81	Somewhat limited   Droughty   Slope	0.61
Perida	  Somewhat limited   Too sandy	    0.81 	  Somewhat limited   Too sandy	0.81	  Somewhat limited   Droughty   Slope	0.44
495D:	 		 		 	
Karlsborg	Somewhat limited   Too sandy   Slope   Depth to   saturated zone	  0.81  0.68  0.44	Depth to	  0.81  0.44 	: -	  1.00  0.75    0.26
Grettum	  Somewhat limited   Too sandy   Slope	  0.81  0.68	  Somewhat limited   Too sandy 	    0.81 	  Very limited   Slope   Droughty	  1.00  0.61
Perida	  Somewhat limited   Too sandy   Slope	    0.81  0.68	  Somewhat limited   Too sandy 	    0.81 	  Very limited   Slope   Droughty	  1.00  0.44
497A:		į		į		
Meenon	Very limited   Depth to   saturated zone   Too sandy	  1.00    0.81	saturated zone	  1.00    0.81	saturated zone	1.00
515A: Manitowish	  Not limited   	       	  Not limited   	 	  Somewhat limited   Droughty   Content of large   stones	0.17
521A:	 	 	 			
Dody	Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	Very limited   Depth to   saturated zone   Ponding	  1.00    1.00
524E:	 		 		 	
Rock outcrop	Not rated		Not rated 		Not rated 	
Frogcreek	Very limited   Depth to   saturated zone   Too stony	  1.00    0.50	Very limited Depth to saturated zone Too stony	  1.00    0.50	Very limited   Depth to   saturated zone	1.00
Metonga	  Very limited   Water erosion   Slope   Too stony	  1.00  1.00  0.47	  Very limited   Water erosion   Slope   Too stony	  1.00  0.56  0.47		1

Table 16b.--Recreational Development--Continued

Map symbol and soil name	   Paths and trail 	.s	   Off-road   motorcycle trails		   Golf fairways   	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
542B: Haugen, very stony	 	0.50	  Somewhat limited   Too stony	      0.50	    Somewhat limited	
Haugen	        Not limited		      Not limited	     	Content of large   stones      Somewhat limited	   
542C:				       	Depth to   saturated zone   Content of large   stones	0.19    0.03 
Haugen, very stony	  Somewhat limited   Too stony   	0.50	Somewhat limited   Too stony 	  0.50     	Somewhat limited   Depth to   saturated zone   Slope   Content of large   stones	  0.19    0.04  0.03
Haugen	  Not limited     	         	  Not limited     	         	Somewhat limited   Depth to   saturated zone   Slope   Content of large   stones	  0.19    0.04  0.03
543B: Anigon	    Not limited 	     	    Not limited 	     	    Not limited 	     
543C2: Anigon	  Very limited   Water erosion 	1.00	  Very limited   Water erosion	    1.00	  Somewhat limited   Slope 	0.04
544F: Menahga	  Very limited   Slope	1.00	  Somewhat limited   Slope	    0.96	  Very limited   Slope   Droughty	    1.00  0.51
Mahtomedi	  Very limited   Slope   Too sandy 	  1.00  0.72	  Somewhat limited   Slope   Too sandy	0.96	  Very limited   Slope   Droughty 	  1.00  1.00
555A: Fordum	  Very limited   Depth to   saturated zone   Ponding   Flooding	  1.00    1.00  0.40	  Very limited   Depth to   saturated zone   Ponding   Flooding	  1.00    1.00  0.40	Depth to	  1.00  1.00    1.00
574B: Sayner	  Somewhat limited   Too sandy   	    0.87   	  Somewhat limited   Too sandy   	      0.87   	  Somewhat limited   Droughty   Content of large   stones	    0.94  0.01

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways 	
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
574C: Sayner	  Somewhat limited   Too sandy   	      0.87     	  Somewhat limited   Too sandy   	      0.87     	  Somewhat limited   Droughty   Slope   Content of large   stones	    0.94  0.37  0.01
574E: Sayner	  Very limited   Slope   Too sandy 	    1.00  0.87 	  Somewhat limited   Too sandy   Slope 	    0.87  0.22 	  Very limited   Slope   Droughty   Content of large   stones	    1.00  0.94  0.01
579B: Parkfalls	  Very limited   Depth to   saturated zone   Too stony	  1.00    0.50	  Very limited   Depth to   saturated zone   Too stony	    1.00    0.50	Very limited   Depth to   saturated zone   Content of large   stones	  1.00    0.01
600A: Haplosaprists	  Not rated		  Not rated		  Not rated	
Psammaquents	  Not rated 	   	  Not rated 	   	  Not rated 	
615B: Cress	  Not limited 	     	    Not limited 	     	  Somewhat limited  Droughty	0.13
615C: Cress	  Not limited 	     	  Not limited   	     	  Somewhat limited   Droughty   Slope	0.13
615D: Cress	    Somewhat limited   Slope 	      0.68	    Not limited   	       	  Very limited   Slope   Droughty	    1.00  0.13
623A: Capitola	  Very limited   Depth to   saturated zone   Ponding   Too stony	    1.00    1.00  0.50	  Very limited   Depth to   saturated zone   Ponding   Too stony	    1.00    1.00  0.50	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00
624A: Ossmer	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	1.00
632A: Aftad	  Not limited     	       	  Not limited     	       	  Somewhat limited   Depth to   saturated zone	    0.19 
632B: Aftad	  Not limited   	       	  Not limited   	         	  Somewhat limited   Depth to   saturated zone	    0.19 

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	Off-road motorcycle trails		Golf fairways   		
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
632C: Aftad	  Not limited   	       	  Not limited   	       	  Somewhat limited   Depth to   saturated zone   Slope	    0.19    0.04
633F: Pence	  Very limited   Slope 	      1.00   	  Somewhat limited   Slope 	      0.96   	  Very limited   Slope   Droughty   Content of large   stones	    1.00  0.30  0.01
Padus	  Very limited   Slope 	    1.00	  Somewhat limited   Slope 	    0.96	  Very limited   Slope 	1.00
648B: Sconsin	  Somewhat limited   Depth to   saturated zone	    0.44 	  Somewhat limited   Depth to   saturated zone	    0.44 	  Somewhat limited   Depth to   saturated zone	0.75
670C: Keweenaw	  Not limited     	 	  Not limited     	         	Somewhat limited   Slope   Droughty   Content of large   stones	  0.37  0.05  0.01
Pence	  Not limited     	         	  Not limited     	         		  0.37  0.30  0.05
670E: Keweenaw	  Very limited   Slope   	    1.00   	  Somewhat limited   Slope   	    0.22   	  Very limited   Slope   Droughty   Content of large   stones	  1.00  0.05  0.01
Pence	  Very limited   Slope   	    1.00   	  Somewhat limited   Slope   	    0.22     	  Very limited   Slope   Droughty   Content of large   stones	  1.00  0.30  0.05
671B: Spoonerhill, stony	  Not limited   	           	  Not limited   	         	  Somewhat limited   Droughty   Depth to   saturated zone   Content of large	    0.42  0.19    0.05
Spoonerhill	  Not limited 	             	  Not limited       		stones 	    0.42  0.19    0.01

Table 16b.--Recreational Development--Continued

Map symbol and soil name	   Paths and trail   	s	Off-road motorcycle trai	ls	Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
680B: Stanberry, stony	  Somewhat limited   Too stony   	      0.50   	  Somewhat limited   Too stony   	      0.50   	  Somewhat limited   Depth to   saturated zone   Content of large   stones	    0.19    0.01
Pence, stony	  Somewhat limited   Too stony   	    0.50   	  Somewhat limited   Too stony   	    0.50   	  Somewhat limited   Droughty   Content of large   stones	  0.30  0.01 
683A: Tipler	    Not limited 	     	    Not limited 	     	    Not limited 	 
706A: Winterfield	  Very limited   Depth to   saturated zone   Flooding	    1.00    0.40	saturated zone	  1.00    0.40	  Very limited   Flooding   Depth to   saturated zone   Droughty	  1.00  1.00    0.10
Totagatic	   Very limited   Depth to   saturated zone   Ponding   Flooding	  1.00    1.00  0.40	saturated zone Ponding	  1.00    1.00  0.40	   Very limited   Flooding   Depth to   saturated zone   Ponding   Droughty	  1.00  1.00    1.00  0.37
724A: Rib	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	saturated zone	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00
Rock outcrop	  Not rated 	   	  Not rated 	 	  Not rated 	   
726B: Sissabagama	  Somewhat limited   Too sandy	    0.81	  Somewhat limited   Too sandy	    0.81	  Somewhat limited   Droughty	0.42
733A: Wozny	  Very limited   Depth to   saturated zone   Ponding   Too stony	  1.00    1.00  0.50	saturated zone Ponding	  1.00    1.00  0.50	saturated zone	  1.00    1.00
771A: Lenroot	  Somewhat limited   Too sandy 	    0.72     	  Somewhat limited   Too sandy 	    0.72     		  0.99  0.19 
827A: Scoba	  Not limited   	         	  Not limited   	       	  Somewhat limited   Depth to   saturated zone	    0.19   

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways			
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value		
853C: Frogcreek	  Very limited   Depth to   saturated zone   Too stony	      1.00    0.50	  Very limited   Depth to   saturated zone   Too stony	      1.00    0.50	  Very limited   Depth to   saturated zone	      1.00		
Stinnett	  Very limited   Depth to   saturated zone   Too stony	  1.00    0.50	Very limited Depth to saturated zone Too stony	  1.00    0.50	  Very limited   Depth to   saturated zone	  1.00 		
Wozny	  Very limited   Depth to   saturated zone   Ponding   Too stony	  1.00    1.00  0.50	   Very limited   Depth to   saturated zone   Ponding   Too stony	  1.00    1.00  0.50	  Very limited   Depth to   saturated zone   Ponding 	  1.00    1.00		
856B: Stinnett	  Very limited   Depth to   saturated zone   Too stony	    1.00    0.50	Very limited Depth to saturated zone Too stony	    1.00    0.50	  Very limited   Depth to   saturated zone	    1.00 		
857B: Frogcreek	  Very limited   Depth to   saturated zone   Too stony	  1.00    0.50	  Very limited   Depth to   saturated zone   Too stony	  1.00    0.50	  Very limited   Depth to   saturated zone	1.00		
857C: Frogcreek	  Very limited   Depth to   saturated zone   Water erosion   Too stony	    1.00    1.00  0.50	  Very limited   Depth to   saturated zone   Water erosion   Too stony	    1.00    1.00  0.50	Very limited Depth to saturated zone Slope	    1.00    0.16		
873B: Stanberry	  Somewhat limited   Too stony 	    0.50     	   Somewhat limited   Too stony 	    0.50     	  Somewhat limited   Depth to   saturated zone   Content of large   stones	  0.19    0.01		
873C: Stanberry	  Somewhat limited   Too stony   	    0.50     	Somewhat limited   Too stony 	    0.50     	Somewhat limited   Slope   Depth to   saturated zone   Content of large   stones	  0.37  0.19    0.01		
873D: Stanberry	  Somewhat limited   Slope   Too stony 	    0.92  0.50 	  Somewhat limited   Too stony 	    0.50     	  Very limited   Slope   Depth to   saturated zone   Content of large   stones	  1.00  0.19    0.01		

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road   motorcycle trai	ls	Golf fairways			
	Rating class and	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value		
905A: Cublake	!	      0.50	  Somewhat limited   Too sandy	      0.50	    Somewhat limited   Droughty	      0.61		
926A: Flink	Depth to saturated zone	    1.00    0.50	saturated zone	    1.00    0.50	  Very limited   Depth to   saturated zone   Droughty	    1.00    0.64		
943D: Stanberry	  Somewhat limited   Too stony   Slope 	    0.50  0.18   	  Somewhat limited   Too stony   	    0.50     	Very limited Slope Depth to saturated zone Content of large stones	  1.00  0.19    0.01		
Greenwood	Depth to saturated zone	    1.00    1.00	saturated zone	    1.00    1.00	saturated zone	  1.00    1.00		
948A: Billyboy	  Somewhat limited   Depth to   saturated zone	    0.44 	  Somewhat limited   Depth to   saturated zone	    0.44 	  Somewhat limited   Depth to   saturated zone	    0.75 		
970C: Keweenaw	  Not limited     	         	  Not limited     	         	Somewhat limited   Slope   Droughty   Content of large   stones	  0.37  0.05  0.01		
Pence	  Somewhat limited   Too stony 	    0.50     	  Somewhat limited   Too stony   	    0.50   	Somewhat limited   Slope   Droughty   Content of large   stones	  0.37  0.30  0.01		
Greenwood	  Not rated 	   	  Not rated 	   	  Not rated 	   		
970E: Keweenaw	  Very limited   Slope   	    1.00   	  Somewhat limited   Slope   	    0.22   	  Very limited   Slope   Droughty   Content of large   stones	  1.00  0.05  0.01		
Pence	  Very limited   Slope   Too stony 	    1.00  0.50 	  Somewhat limited   Too stony   Slope 	  0.50  0.22 	   Very limited   Slope   Droughty   Content of large   stones	  1.00  0.30  0.01		
Greenwood	  Not rated 	   	  Not rated 	   	  Not rated 	   		

Table 16b.--Recreational Development--Continued

Map symbol and soil name	   Paths and trail 	s	Off-road motorcycle trai	ls	Golf fairways 			
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value		
1070C: Fremstadt	    Not limited   	     	    Not limited   	     	    Somewhat limited   Slope   Droughty	    0.16  0.01		
Cress	  Not limited   	     	  Not limited 	     	  Somewhat limited   Droughty   Slope	    0.13  0.04		
1070D: Fremstadt	    Somewhat limited   Slope 	      0.92	    Not limited   	       	    Very limited   Slope   Droughty	      1.00  0.01		
Cress	  Somewhat limited   Slope	0.68	  Not limited   		  Very limited   Slope   Droughty	  1.00  0.13		
1080B: Spoonerhill	  Not limited       		  Not limited       		  Somewhat limited   Droughty   Depth to   saturated zone   Content of large   stones	    0.42  0.19    0.01		
Spoonerhill, stony	  Not limited     	         	  Not limited     	         		  0.42  0.19    0.05		
Cress	  Not limited 		  Not limited 		  Somewhat limited   Droughty	0.13		
1653C: Stanberry	  Somewhat limited   Too stony   	    0.50     	  Somewhat limited   Too stony   	    0.50     	  Somewhat limited   Depth to   saturated zone   Slope   Content of large   stones	    0.19    0.04  0.01		
Parkfalls	   Very limited   Depth to   saturated zone   Too stony	:	  Very limited   Depth to   saturated zone   Too stony	  1.00    0.50	saturated zone	  1.00    0.01		
Wozny	   Very limited   Depth to   saturated zone   Ponding   Too stony	  1.00    1.00  0.50	saturated zone	  1.00    1.00  0.50	  Very limited   Depth to   saturated zone	  1.00    1.00		
2015: Pits	    Not rated 		    Not rated 		    Not rated 	     		

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways   			
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value		
2050: Landfill	    Not rated 	     	    Not rated	     	    Not rated	   		
3011A: Barronett	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	  -  1.00  -  1.00	  Very limited   Depth to   saturated zone   Ponding	1.00		
3125A: Meehan	  Very limited   Depth to   saturated zone   Too sandy	    1.00    0.81	  Very limited   Depth to   saturated zone   Too sandy	    1.00    0.81	  Very limited   Depth to   saturated zone   Droughty	  1.00    0.88		
3126A: Wurtsmith	  Somewhat limited   Too sandy 	    0.60   	  Somewhat limited   Too sandy 	    0.60   	Somewhat limited   Droughty   Depth to   saturated zone	  0.83  0.19		
3276A: Au Gres	  Very limited   Depth to   saturated zone	    1.00   	  Very limited   Depth to   saturated zone	    1.00   	  Very limited   Depth to   saturated zone   Droughty	  1.00    0.09		
3312B: Glendenning, very stony	  Very limited   Depth to   saturated zone   Too stony	    1.00    0.50	Very limited Depth to saturated zone Too stony	    1.00    0.50	  Very limited   Depth to   saturated zone   Content of large   stones	  1.00    0.03		
Glendenning	  Very limited   Depth to   saturated zone   	    1.00     	  Very limited   Depth to   saturated zone 	 	   Very limited   Depth to   saturated zone   Content of large   stones	  1.00    0.01		
3336A: Fenander	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	1.00		
3403A: Loxley	  Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	  Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	Very limited   Content of   organic matter   Depth to   saturated zone   Ponding	  1.00    1.00 		
Beseman	  Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	  Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	  Very limited   Content of   organic matter   Depth to   saturated zone   Ponding	  1.00    1.00    1.00		

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways			
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value		
						İ		
3403A: Dawson	  Very limited	 	  Very limited	 	  Very limited			
24#5011	Depth to	1.00		1.00	-	1.00		
	saturated zone	į	saturated zone	į	saturated zone	į		
	Ponding	1.00	Ponding	1.00	Ponding	1.00		
3424C:								
Frogcreek	Very limited	1	Very limited	ĺ	Very limited	İ		
	Depth to	1.00	-	1.00	-	1.00		
	saturated zone Too stony	  0.50	saturated zone Too stony	  0.50	saturated zone			
	100 stony	0.50	100 stony	0.50				
Magroc	Very limited	į	Very limited	į	Very limited	į		
	Depth to	1.00	-	1.00	-	1.00		
	saturated zone		saturated zone		saturated zone Content of large			
	Too stony	0.50 	Too stony 	0.50 	stones			
Stinnett	  Very limited	 	  Very limited	 	  Very limited			
beimeee	Depth to	1.00	-	1.00	Depth to	1.00		
	saturated zone	į	saturated zone	į	saturated zone	į		
	Too stony	0.50	Too stony	0.50				
Rock outcrop	  Not rated 	   	  Not rated 	   	  Not rated 			
3446A:								
Newson	Very limited		Very limited		Very limited			
	Depth to	1.00	_	1.00		1.00		
	saturated zone Ponding	  1.00	saturated zone Ponding	  1.00	saturated zone Ponding	1.00		
	Foliating		Foliding		Foliding			
3448B:								
Grettum	Somewhat limited   Too sandy	  0.81	Somewhat limited   Too sandy	  0.81	Somewhat limited   Droughty	0.61		
	100 sandy		100 sandy		Dioughty			
3448C:		İ		İ		1		
Grettum		  0.81	Somewhat limited	:	Somewhat limited	0.61		
	Too sandy		Too sandy 	0.81 	Droughty   Slope	0.01		
25163			l I					
3516A: Slimlake	  Not limited	 	  Not limited	 	  Somewhat limited	l		
DIIMIUNG					Droughty	0.21		
3629B:	 	 	[ [	 	[ 			
Perida	Somewhat limited		  Somewhat limited		  Somewhat limited			
	Too sandy	0.81	Too sandy	0.81	Droughty	0.44		
M-W:		 	 	 	[ 	1		
Miscellaneous water	Not rated		Not rated		Not rated			
W:		 	[ 	 	[ 			
Water	Not rated	i	Not rated	i	Not rated	i		

Table 17.--Wildlife Habitat

(See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable)

	<u> </u>	Pote	ential fo		Potential as habitat for					
Map symbol and soil name	Grain and seed crops	  Grasses   and  legumes	ceous	wood		  Wetland  plants 	  Shallow   water   areas	Open-   land   wild-   life	Wood-   land   wild-   life	Wetland   wild-   life
3A: Totagatic	    Poor	    Poor	    Poor	    Poor	    Poor	    Good	    Good	    Poor	    Poor	    Good
Bowstring	  Poor	  Poor	  Poor	  Poor	  Poor	  Good	  Good	  Poor	  Poor	  Good
Ausable	  Poor	  Poor	  Poor	  Poor	  Poor	  Good	  Good	  Poor	  Poor	  Good
22A: Comstock	    Fair 	    Good	    Good	    Good	    Good	    Fair 	    Fair 	    Good	    Good	    Fair 
24A: Poskin	    Fair 	    Good	    Good	  Good	    Good 	    Fair 	    Fair 	    Good	    Good	    Fair 
27A: Scott Lake	  Fair 	  Good 	  Good 	  Good 	  Good 	  Poor 	  Very   poor	  Good 	  Good 	  Very   poor
28B: Haugen, very stony	    Very   poor	    Poor 	    Good 	    Good 	    Good 	    Poor 	    Very   poor	    Poor 	    Good 	  Very   poor
Haugen	  Good 	  Good 	  Good 	  Good 	  Good 	  Poor 	  Very   poor	  Good 	  Good 	  Very   poor
Rosholt, very stony	  Good 	  Good 	  Good 	  Good 	  Good 	  Poor 	  Very   poor	  Good 	  Good 	  Very   poor
Rosholt	  Good 	  Good 	  Good 	  Good 	  Good 	  Poor 	  Very   poor	  Good 	  Good 	  Very   poor
28C: Haugen, very stony	    Fair 	    Good 	    Good 	    Good 	    Good 	  Very   poor	    Very   poor	    Good 	    Good 	  Very   poor
Haugen	  Good 	  Good 	  Good 	  Good 	  Good 	  Poor 	  Very   poor	  Good 	  Good 	  Very   poor
Rosholt, very stony	  Good 	  Good 	  Good 	  Good 	  Good 	  Poor 	  Very   poor	  Good 	  Good 	  Very   poor
Rosholt	  Fair   	  Good   	  Good   	  Good 	  Good   	  Very   poor 	  Very   poor 	  Good   	  Good   	  Very   poor 
33B: Chetek	  Fair 	  Fair 	  Fair 	  Fair 	  Fair 	  Very   poor	  Very   poor	  Fair 	  Fair 	  Very   poor
33C: Chetek	  Fair 	    Fair 	    Fair 	  Fair 	    Fair 	  Very   poor	  Very   poor	     <b>Fair</b> 	  Fair 	  Very   poor
38A: Rosholt	    Good 	    Good 	    Good 	    Good 	    Good 	    Poor 	    Very   poor	    Good 	    Good 	  Very   poor
38B: Rosholt	    Good 	    Good 	    Good 	    Good   	    Good 	    Poor   	    Very   poor 	    Good 	    Good 	    Very   poor 

Table 17.--Wildlife Habitat--Continued

		Pote	ential f	or habit	at eleme	nts		bitat for-		
Map symbol and soil name	Grain and seed crops	  Grasses   and  legumes	ceous	wood		  Wetland  plants 	  Shallow   water   areas	Open-   land   wild-   life	Wood-   land   wild-   life	Wetland   wild-   life 
38C: Rosholt	    Fair 	    Good	    Good	    Good	    Good	    Poor 	  Very   poor	    Good	    Good	  Very   poor
38D: Rosholt	    Poor 	    Fair 	    Good 	    Good 	    Good 	  Very   poor	    Very   poor	    Fair 	    Good 	  Very   poor
42D: Amery	    Fair   	    Good 	    Good 	    Good 	    Good 	  Very   poor	    Very   poor	    Good 	  Good 	  Very   poor
43B: Antigo	  Good 	  Good 	  Good 	  Good 	    Good 	  Poor 	  Very   poor	  Good 	  Good 	  Very   poor
43C: Antigo	    Fair 	    Good 	  Good 	  Good 	    Good 	  Very   poor	  Very   poor	  Good 	  Good 	  Very   poor
43D: Antigo	    Poor 	     <b>Fair</b> 	    Good 	  Good 	  Good 	  Very   poor	  Very   poor	  Fair 	  Good 	  Very   poor
48A: Brill	    Good 	    Good 	    Good 	    Good 	    Good 	  Poor	    Poor 	    Good 	  Good	  Poor
63A: Crystal Lake	  Good 	  Good	  Good	  Good	  Good	  Poor	  Poor	  Good	  Good	  Poor
63B: Crystal Lake	  Good 	  Good	  Good	  Good	  Good 	  Poor	  Poor 	  Good	  Good 	  Poor 
63C: Crystal Lake	  Fair 	  Good 	  Good 	  Good 	  Good 	  Very   poor	  Very   poor	  Good	  Good 	  Very   poor
63E: Crystal Lake	    Poor 	    Fair 	    Good 	    Good 	    Good 	  Very   poor	    Very   poor	    Fair 	    Good 	  Very   poor
64A: Totagatic	    Poor	    Poor	    Poor	    Poor	    Poor	  Good	    Good	    Poor	  Poor	  Good
Winterfield	  Poor 	  Fair 	  Fair 	  Fair 	  Fair 	  Fair 	  Fair 	  Fair 	  Fair 	  Fair 
69B: Keweenaw	  Poor	  Fair 	  Good	  Good 	  Good 	  Very   poor	  Very   poor	  Fair 	  Good 	  Very   poor
Sayner	  Poor 	  Poor 	  Fair 	  Poor 	  Poor 	  Very   poor	  Very   poor	  Poor 	  Poor 	  Very   poor
Vilas	  Very   poor	  Poor 	  Fair 	  Poor 	  Poor 	  Very   poor	  Very   poor	  Poor 	  Poor 	  Very   poor
69C: Keweenaw	    Poor 	    Fair 	    Good 	    Good 	    Good 	  Very   poor	    Very   poor	    Fair 	    Good 	    Very   poor

Table 17.--Wildlife Habitat--Continued

	<u> </u>	Pote		or habit	at eleme	nts	Potential as habitat				
Map symbol and soil name	Grain and seed	  Grasses   and	ceous	wood	erous	  Wetland  plants	water	wild-	Wood-   land   wild-	Wetland   wild-   life	
	crops	legumes	plants	trees	plants	1	areas	life	life	1	
69C: Sayner	    Poor 	    Poor 	    Fair 	    Poor 	    Poor 	  Very   poor	    Very   poor	Poor	    Poor 	  Very   poor	
Vilas	  Very   poor	  Poor   	  Fair   	  Poor 	  Poor 	  Very   poor	  Very   poor	  Poor	  Poor 	Very   poor	
69E:	! 		! 				! 				
Keweenaw	  Poor 	Fair 	Good	Good	Good	Very   poor	  Very   poor	Fair	Good	Very   poor	
Sayner	  Very   poor	Poor	  Fair 	  Poor 	Poor	Very   poor	  Very   poor	Poor	Poor	Very   poor	
Vilas	  Very   poor 	  Poor   	  Fair   	  Poor   	  Poor   	  Very   poor	  Very   poor 	  Poor	  Poor   	  Very   poor	
74B: Vilas	    Poor 	    Fair 	    Fair 	  Poor 	  Poor 	  Very   poor	  Very   poor	Fair	  Poor 	  Very   poor	
74C: Vilas	    Poor 	    Fair 	    Fair 	  Poor	  Poor	  Very   poor	  Very   poor	Fair	  Poor	  Very   poor	
74D: Vilas	    Very   poor	    Poor 	    Fair 	    Poor 	    Poor 	  Very   poor	    Very   poor	Poor	    Poor 	  Very   poor	
100B: Menahga	    Poor 	    Poor 	    Fair 	    Poor 	    Fair 	  Very   poor	    Very   poor	Poor	    Fair 	  Very   poor	
100C: Menahga	    Poor 	    Poor 	    Fair 	    Poor 	    Fair 	    Very   poor	    Very   poor	Poor	    Fair 	    Very   poor	
100D: Menahga	    Very   poor	    Poor 	    Fair 	    Poor 	    Fair 	    Very   poor	    Very   poor	Poor	    Fair 	  Very   poor	
127D: Amery	     <b>Fair</b> 	    Good 	    Good 	    Good 	    Good 	  Very   poor	    Very   poor	Good	    Good 	  Very   poor	
Rosholt	  Poor 	  Fair 	  Good 	  Good 	  Good 	  Very   poor	  Very   poor	Fair	  Good 	  Very   poor	
127E: Amery	  Very   poor	  Very   poor	    Good 	    Good	    Good 	  Very   poor	  Very   poor	  Poor	    Fair 	    Very   poor	
Rosholt	  Very   poor	  Poor 	  Good 	  Good 	  Good 	  Very   poor	  Very   poor	Poor	  Good 	  Very   poor	
156B:	 	 	 	 			 				
Magnor, very stony	Very   poor 	Poor   	Good   	Good   	Good   	Poor 	Poor   	Poor	Good   	Poor   	
Magnor	Fair	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor	

Table 17.--Wildlife Habitat--Continued

	Potential for habitat elements							Potential as habitat for-				
Map symbol and soil name	Grain and seed crops	Grasses and	ceous	wood		  Wetland  plants 	  Shallow   water   areas	Open-   land   wild-   life	Wood-   land   wild-   life	Wetland   wild-   life		
157B: Freeon, very stony	  Very   poor	    Poor	    Good	    Good	    Good	    Poor	    Poor	    Poor	    Good	    Poor		
Freeon	  Good 	  Good 	  Good 	Good	  Good 	  Poor 	  Poor 	  Good 	  Good 	  Poor 		
157C: Freeon, very stony	  Very   poor	  Poor 	  Good 	  Good 	  Good 	  Very   poor	  Very   poor	  Poor 	  Good 	  Very   poor		
Freeon	  Fair 	  Good 	  Good 	Good	Good	  Very   poor	  Very   poor	  Good 	Good	  Very   poor		
160A: Oesterle	    Fair 	    Good 	    Good 	    Good 	    Good 	    Poor 	    Poor 	    Good 	    Good 	    Poor 		
182B: Padus	  Fair 	  Good 	  Good 	  Good 	  Good 	  Very   poor	  Very   poor	  Good 	  Good 	  Very   poor		
182C: Padus	  Fair	    Good 	    Good 	  Good	  Good	  Very   poor	  Very   poor	    Good 	  Good 	  Very   poor		
192A: Worcester	     <b>Fair</b> 	    Good 	    Good 	  Good	    Good 	     <b>Fair</b> 	    Fair 	    Good 	    Good 	    Fair 		
193A: Minocqua	  Very   poor	  Fair 	  Fair 	  Fair 	  Fair 	  Good 	  Good	  Poor	  Fair 	  Good 		
215B: Pence	    Fair   	    Fair   	    Fair   	    Fair   	    Fair   	    Very   poor	    Very   poor	    Fair   	    Fair   	    Very   poor 		
215C: Pence	  Fair 	  Fair 	  Fair 	  Fair 	  Fair 	  Very   poor	  Very   poor	  Fair 	  Fair 	  Very   poor		
215D: Pence	    Poor 	    Fair 	    Fair 	    Fair 	    Fair 	  Very   poor	    Very   poor	    Fair 	    Fair 	  Very   poor		
315A: Rib	    Poor	    Fair	    Fair	  Fair	    Fair	    Good	    Good	    Fair	    Fair	    Good		
337A: Plover	    Fair	    Good	    Good	    Good	    Good	    Fair	    Fair	    Good	    Good	    Fair		
368B: Mahtomedi	    Poor 	    Fair 	    Fair 	  Poor	    Fair 	  Very   poor	    Very   poor	    Fair 	    Fair 	  Very   poor		
Cress	  Fair 	  Fair 	  Fair 	  Fair 	  Fair 	  Very   poor	  Very   poor	  Fair 	  Fair 	  Very   poor		
368C: Mahtomedi	    Poor 	    Fair 	    Fair 	    Poor 	    Fair 	    Very   poor	    Very   poor	    Fair 	    Fair 	  Very   poor		
Cress	  Fair   	  Fair   	  Fair   	  Fair   	  Fair   	  Very   poor	  Very   poor 	  Fair   	  Fair   	  Very   poor 		

Table 17.--Wildlife Habitat--Continued

		Pote	ential f	or habit	at eleme	nts		Potenti	Potential as habitat for		
Map symbol and soil name	Grain and seed crops	  Grasses   and  legumes	ceous	wood	1	  Wetland  plants 	:	Open-   land   wild-   life	Wood-   land   wild-   life	Wetland   wild-   life	
368D: Mahtomedi	    Poor 	    Fair 	    Fair 	    Poor 	    Fair 	  Very   poor	    Very   poor	    Fair 	    Fair 	    Very   poor	
Cress	  Fair 	  Fair 	  Fair 	Fair	  Fair 	Very   poor	  Very   poor	  Fair 	  Fair 	Very   poor	
371A: Croswell	    Poor 	    Fair 	    Fair 	    Fair 	    Fair 	    Poor 	    Very   poor	    Fair 	    Fair 	    Very   poor	
380B: Cress	    Fair 	    Fair 	    Fair 	    Fair 	    Fair 	  Very   poor	  Very   poor	    Fair 	    Fair 	  Very   poor	
Rosholt	  Good 	  Good 	  Good 	  Good 	  Good 	  Poor 	  Very   poor	  Good 	  Good 	  Very   poor	
380C: Cress	    Fair 	    Fair 	    Fair 	    Fair 	    Fair 	  Very   poor	    Very   poor	    Fair 	    Fair 	  Very   poor	
Rosholt	  Fair 	  Good 	  Good 	  Good 	  Good 	Very   poor	  Very   poor	  Good 	  Good 	  Very   poor	
380D: Cress	    Poor 	    Fair 	    Fair 	    Fair 	    Fair 	  Very   poor	    Very   poor	    Poor 	    Fair 	    Very   poor	
Rosholt	  Very   poor	  Fair 	  Good 	  Good 	  Good 	  Very   poor	  Very   poor	  Fair 	  Good 	  Very   poor	
383B: Mahtomedi	    Poor 	     <b>Fair</b> 	    Fair 	    Poor 	    Fair 	    Very   poor	    Very   poor	    Fair 	    Fair 	    Very   poor	
383C: Mahtomedi	    Poor 	    Fair 	    Fair 	    Poor 	    Fair 	  Very   poor	  Very   poor	    Fair 	    Fair 	  Very   poor	
383D: Mahtomedi	    Very   poor	    Poor 	    Fair 	    Poor 	    Fair 	    Very   poor	    Very   poor	    Poor 	    Fair 	  Very   poor	
396B: Friendship	    Poor 	    Poor 	    Fair 	    Fair 	    Good 	    Poor 	    Very   poor	    Fair 	    Good 	  Very   poor	
Wurtsmith	  Poor 	  Poor 	  Fair 	  Fair 	  Fair 	  Poor 	  Very   poor	  Poor 	  Fair 	  Very   poor	
Grayling	  Poor   	  Poor 	  Fair   	  Poor 	  Poor 	  Poor 	  Very   poor	  Poor 	  Poor 	  Very   poor	
397A: Perchlake	    Poor 	    Fair 	    Good 	    Fair 	    Fair 	    Fair 	    Fair 	    Fair 	    Fair 	    Fair 	
399B: Grayling	  Poor 	  Poor 	  Fair 	  Poor 	  Fair 	  Poor 	  Very   poor	  Poor 	  Fair 	  Very   poor	

Table 17.--Wildlife Habitat--Continued

	1	Pote		or habit	at eleme	nts		Potenti	bitat for	
Map symbol and soil name	Grain and seed crops	  Grasses   and  legumes	ceous	wood	  Conif-   erous  plants	  Wetland  plants 	  Shallow   water   areas	Open-   land   wild-   life	Wood-   land   wild-   life	Wetland   wild-   life 
399C: Grayling	    Poor 	    Poor 	    Fair 	    Poor 	    Fair 	    Very   poor	  Very   poor	    Poor 	    Fair 	  Very   poor
399D: Grayling	    Very   poor	    Poor 	    Fair 	    Poor 	    Fair 	  Very   poor	    Very   poor	    Poor 	    Fair 	    Very   poor
405A: Lupton	    Poor	    Poor	    Poor	    Poor	    Poor	    Good	    Good	    Poor	    Poor	    Good
Cathro	  Poor 	  Poor 	  Poor 	  Poor	Poor	Good	  Good 	  Poor 	  Poor 	  Good 
Tawas	Poor	  Poor	  Poor 	Poor	Poor	Good	  Good 	  Poor 	Poor	  Good
406A: Loxley	  Very   poor	  Poor 	  Poor 	  Poor 	  Poor 	  Good 	  Good 	  Poor 	    Poor 	  Good 
407A: Seelyeville	  Very   poor	  Very   poor	  Very   poor	  Very   poor	  Very   poor	  Good 	  Good	  Very   poor	  Very   poor	  Good 
Markey	  Poor	  Poor	  Poor	  Poor	  Poor	Good	  Good	  Poor	  Poor	  Good
410A: Seelyeville	    Very   poor	    Very   poor	    Very   poor	    Very   poor	    Very   poor	    Good 	    Good 	    Very   poor	    Very   poor	    Good 
Cathro	  Poor	  Poor	  Poor	  Poor	  Poor	  Good	  Good	  Poor	  Poor	  Good
412A: Rifle	    Very   poor	    Poor 	    Poor 	    Poor 	    Poor 	    Good 	    Good 	    Poor 	    Poor 	    Good 
Tacoosh	  Poor	  Poor	  Poor	  Poor	Poor	Good	  Good	  Poor	  Poor	  Good
415A: Greenwood	    Very   poor	    Poor	    Poor	    Poor 	    Poor 	    Good 	    Good	    Poor	    Poor	    Good 
439B: Graycalm	    Poor 	    Poor 	    Fair 	    Good 	    Good 	    Very   poor	    Very   poor	    Poor 	    Good 	    Very   poor
Menahga	  Poor 	  Poor 	  Fair 	  Poor 	  Fair 	  Very   poor	  Very   poor	  Poor 	  Fair 	  Very   poor
439C: Graycalm	    Poor 	    Poor 	    Fair 	    Good 	    Good 	  Very   poor	    Very   poor	    Poor 	    Good 	  Very   poor
Menahga	  Poor 	  Poor 	  Fair   	  Poor 	  Fair 	  Very   poor	  Very   poor	  Poor 	  Fair   	  Very   poor
439D: Graycalm	  Poor	    Poor 	    Fair 	    Good 	    Good 	  Very   poor	    Very   poor	    Poor	    Good	  Very   poor
Menahga	  Poor 	  Poor 	  Fair 	  Poor 	  Fair 	  Very   poor	  Very   poor	  Poor 	  Fair 	  Very   poor

Table 17.--Wildlife Habitat--Continued

		Pote	ential f	or habit	at eleme	nts		Potentia	al as ha	bitat for
Map symbol and soil name	Grain and seed crops	  Grasses   and  legumes	ceous	wood		  Wetland  plants 	  Shallow   water   areas	Open-   land   wild-   life	Wood-   land   wild-   life	Wetland   wild-   life 
441C: Freeon	  Very   poor	    Poor 	    Good 	    Good 	    Good 	  Very   poor	    Very   poor	    Poor 	    Good 	    Very   poor
Cathro	  Poor 	  Poor 	  Poor 	  Poor 	  Poor 	  Good 	  Good 	  Poor 	  Poor	  Good 
442C: Haugen	  Fair 	  Good	  Good	  Good	  Good	  Very   poor	  Very   poor	  Good	  Good	  Very   poor
Greenwood	  Very   poor 	  Poor   	  Poor   	  Poor   	  Poor   	  Good   	  Good 	  Poor   	  Poor   	  Good 
443D: Amery	  Fair 	  Good	  Good	  Good 	  Good 	  Very   poor	  Very   poor	  Good	  Good	  Very   poor
Greenwood	  Very   poor	  Poor 	  Poor 	  Poor 	  Poor 	  Good 	  Good 	  Poor 	  Poor 	  Good 
461A: Bowstring	    Poor 	    Poor 	    Poor 	    Poor 	    Poor 	    Good 	    Good 	    Poor 	    Poor 	    Good 
484A: Greenwood	  Very   poor	  Poor	  Poor	  Poor 	  Poor 	  Good 	  Good	  Poor	  Poor	  Good 
Beseman	  Very   poor	  Poor 	  Poor 	  Poor 	  Poor 	  Good 	  Good 	  Poor 	  Poor 	  Good 
495B: Karlsborg	    Fair	    Good	    Good	    Good	    Good	    Poor	    Poor	    Good	    Good	    Poor
Grettum	  Poor 	  Poor 	  Fair 	  Good 	  Good 	Very   poor	  Very   poor	  Poor 	  Good 	  Very   poor
Perida	  Poor 	  Fair 	  Good 	  Fair 	  Fair 	Poor	  Poor 	  Fair 	  Fair 	  Poor 
495C: Karlsborg	  Poor 	  Good 	  Good 	  Good 	  Good 	  Very   poor	  Very   poor	  Fair 	  Good 	  Very   poor
Grettum	  Poor 	  Poor 	  Fair 	  Good 	  Good 	  Very   poor	  Very   poor	  Poor 	  Good 	  Very   poor
Perida	  Poor 	  Fair 	  Good 	  Fair 	  Fair 	  Poor 	  Poor 	  Fair 	  Fair 	  Poor 
495D: Karlsborg	  Poor 	  Good 	  Good	  Good 	  Good 		  Very   poor	  Fair 	  Good	  Very   poor
Grettum	  Poor 	  Poor 	  Fair 	  Good 	  Good 	  Very   poor	  Very   poor	  Poor 	  Good 	  Very   poor
Perida	  Poor 	  Fair 	  Good 	  Fair 	  Fair 	  Poor 	  Poor 	  Fair 	  Fair 	  Poor 
497A: Meenon	  Poor	    Fair 	    Good 	  Good	  Good	    Fair 	    Fair 	    Fair 	    Good	    Fair 
515A: Manitowish	  Fair 	    Fair 	    Good 	    Good 	    Good 	  Poor 	    Poor 	    Fair 	    Good	    Poor 

Table 17.--Wildlife Habitat--Continued

		Pote	ential f		Potential as habitat for					
Map symbol and	Grain and	  Grasses	Wild  herba-	   Hard-	  Conif-	  Wetland		Open-	Wood-   land	Wetland   wild-
soil name	seed   crops	and legumes	ceous	wood   trees	erous  plants	plants	water   areas	wild-   life	wild-   life	life
521A: Dody 524E:	İ	      Poor 	      Poor 	    Poor 	      Poor 	    Good 	    Good	      Poor 	      Poor 	    Good 
Rock outcrop.	  Very   poor	    Poor 	    Good 	    Good 	    Good 	    Poor 	    Very   poor	    Fair 	    Good 	  Very   poor
Metonga	  Very   poor	  Fair   	  Good 	  Good 	  Good 	  Very   poor	  Very   poor 	  Fair   	  Good 	  Very   poor
542B: Haugen, very stony	  Good 	  Good 	  Good 	  Good 	  Good 	  Poor 	  Very   poor	  Good 	  Good 	  Very   poor
Haugen	Good	Good	Good	Good	Good	Poor   	  Very   poor	Good	Good	Very   poor
542C: Haugen, very stony	  Fair 	  Good 	  Good 	  Good 	  Good 	  Very   poor	  Very   poor	  Good 	  Good 	  Very   poor
Haugen	Good 	  Good 	  Good 	Good	  Good 	Poor	  Very   poor	  Good 	Good	  Very   poor
543B: Anigon	  Good 	  Good 	    Good 	  Good 	  Good 	  Poor 	  Very   poor	  Good 	  Good 	  Very   poor
543C2: Anigon	  Fair 	  Good 	    Good 	  Good 	  Good 	  Very   poor	  Very   poor	    Good 	  Good 	  Very   poor
544F: Menahga	  Very   poor	    Poor 	    Fair 	  Poor	  Fair 	  Very   poor	  Very   poor	    Poor 	  Fair 	  Very   poor
Mahtomedi	  Very   poor	  Poor 	  Fair 	Poor	  Fair 	  Very   poor	  Very   poor	  Poor 	  Fair 	  Very   poor
555A: Fordum	  Poor	    Fair 	    Fair 	  Fair 	    Fair 	  Good	    Good	    Fair 	  Fair	  Good
574B: Sayner	  Poor 	  Fair   	  Fair   	  Poor 	  Poor 	  Very   poor	  Very   poor	  Fair 	  Poor 	  Very   poor 
574C: Sayner	  Poor 	    Fair   	  Fair 	  Poor 	  Poor 	  Very   poor	  Very   poor	  Fair 	  Poor 	  Very   poor
574E: Sayner	  Very   poor	     <b>Fair</b>   	     <b>Fair</b>   	  Poor 	  Poor 	  Very   poor	  Very   poor	    Poor 	  Poor 	  Very   poor
579B: Parkfalls	  Fair 	    Good 	    Good 	  Good	    Good 	    Poor 	    Poor 	    Good 	    Good 	    Poor 

Table 17.--Wildlife Habitat--Continued

		Pote	ential fo		Potential as habitat for					
Map symbol and soil name	Grain and seed	  Grasses   and	ceous	wood	erous	  Wetland  plants	water	wild-	Wood-   land   wild-	Wetland   wild-   life
600A. Haplosaprists and Psammaquents	crops	legumes	plants       	trees	plants	       	areas	life       	life	         
615B: Cress	    Fair 	    Fair 	    Fair 	  Fair	    Fair 	  Very   poor	  Very   poor	    Fair 	    Fair 	  Very   poor
615C: Cress	    Fair 	    Fair 	    Fair 	    Fair 	    Fair 	  Very   poor	  Very   poor	    Fair 	    Fair 	    Very   poor
615D: Cress	    Poor   	    Fair   	     <b>Fair</b>   	    Fair   	    Fair   	    Very   poor	    Very   poor	    Poor 	    Fair   	    Very   poor 
623A: Capitola	  Very   poor	  Poor	  Fair 	  Fair	  Fair 	  Good	  Good	  Poor	  Fair 	  Good
624A: Ossmer	    Fair 	    Good 	    Good 	    Good 	    Good 	    Fair 	    Fair 	    Good 	    Good 	    Fair 
632A: Aftad	  Good 	  Good 	  Good	  Good 	  Good 	  Poor 	  Very   poor	  Good	  Good	  Very   poor
632B: Aftad	    Good 	    Good 	    Good 	    Good 	    Good 	    Poor 	    Very   poor	    Good	    Good 	    Very   poor
632C: Aftad	    Good 	    Good 	    Good 	    Good 	    Good 	    Poor 	    Very   poor	    Good	    Good 	    Very   poor
633F: Pence	    Very   poor	    Poor 	    Fair 	    Fair 	    Fair 	    Very   poor	    Very   poor	    Poor	    Fair 	    Very   poor
Padus	  Poor 	  Fair 	  Fair 	  Fair 	  Fair   	  Very   poor	  Very   poor	  Fair 	  Fair 	  Very   poor
648B: Sconsin	  Good 	    Good 	    Good 	  Good 	  Good 	  Poor 	  Very   poor	  Good 	  Good 	  Very   poor
670C: Keweenaw	    Poor 	    Fair 	    Good 	    Good 	    Good 	  Very   poor	    Very   poor	    Fair 	    Good 	    Very   poor
Pence	   <b>Fair</b>   	  Fair   	  Fair   	   <b>Fair</b>   	  Fair   	  Very   poor	  Very   poor	  Fair   	  Fair   	  Very   poor 
670E: Keweenaw	    Very   poor	    Fair 	    Good 	    Good 	    Good 	  Very   poor	    Very   poor	    Poor 	    Good 	  Very   poor
Pence	  Very   poor 	  Poor 	  Fair   	  Fair   	  Fair   	  Very   poor 	  Very   poor 	  Poor 	  Fair   	  Very   poor 

Table 17.--Wildlife Habitat--Continued

		Pote	ential f	or habit	at eleme	nts		Potenti	al as ha	bitat for
Map symbol and soil name	Grain and seed crops	  Grasses   and  legumes	ceous	wood	  Conif-   erous  plants	  Wetland  plants	  Shallow   water   areas	Open-   land   wild-   life	Wood-   land   wild-   life	Wetland   wild-   life
671B: Spoonerhill, stony	    Poor 	    Fair   	    Good 	    Good 	    Good 	    Poor 	    Very   poor	     <b>Fair</b>   	  Good 	    Very   poor
Spoonerhill	Poor	  Fair 	  Good 	Good	Good	Poor	  Very   poor	  Fair 	Good	Very   poor
680B: Stanberry, stony	    Very   poor	    Poor 	    Good 	    Good 	    Good 	    Poor 	    Very   poor	    Poor 	  Good 	  Very   poor
Pence, stony	  Very   poor	  Poor 	  Fair 	  Fair 	Fair	Very   poor	  Very   poor	  Poor 	Fair	Very   poor
683A: Tipler	    Fair   	    Good 	    Good 	    Good 	  Good 	  Poor 	    Very   poor	    Good 	  Good 	  Very   poor
706A: Winterfield	    Poor	    Fair	    Fair	    Fair	  Fair	  Fair	    Fair	    Fair	  Fair	  Fair
Totagatic	  Very   poor	  Poor 	  Poor 	  Poor 	Poor	Good	  Good 	  Poor 	Poor	Good
724A: Rib Rock outcrop.	    Poor   	    Fair   	    Fair   	    Fair   	    Fair   	    Good   	    Good 	    Fair   	    Fair   	    Good 
726B: Sissabagama	      Poor 	      Fair 	      Fair 	      Fair 	      Fair 	      Poor 	    Very   poor	      Poor 	      Fair 	      Very   poor
733A: Wozny	    Very   poor	    Poor 	    Fair 	    Fair 	    Fair 	    Good 	    Good 	    Poor 	  Fair	  Good
771A: Lenroot	    Poor 	    Fair 	    Fair 	    Poor 	    Fair 	  Very   poor	    Very   poor	    Fair 	    Fair 	  Very   poor
827A: Scoba	    Fair 	    Good 	    Good 	    Good 	    Good 	    Poor 	    Very   poor	    Good 	  Good	  Very   poor
853C: Frogcreek	    Poor 	    Good 	    Good 	    Good 	    Good 	    Poor 	    Very   poor	    Good	  Good	    Poor 
Stinnett	  Fair 	  Good 	  Good 	  Good 	  Good 	  Poor 	  Very   poor	  Good 	  Good 	  Very   poor
Wozny	  Very   poor	  Poor 	  Fair 	  Fair 	  Fair 	  Good 	  Good 	  Poor 	  Fair 	  Good 
856B: Stinnett	    Fair 	    Good 	    Good 	    Good 	    Good 	    Poor 	    Very   poor	    Good 	    Good 	  Very   poor
857B: Frogcreek	    Poor   	    Good 	    Good   	    Good   	    Good 	    Poor   	    Very   poor 	    Good 	  Good 	    Poor   

Table 17.--Wildlife Habitat--Continued

		Pote		or habit	at eleme	nts				bitat fo
Map symbol	Grain		Wild					Open-	Wood-	Wetlan
and	and	Grasses		1	1	Wetland	:		land	wild-
soil name	seed	and	ceous	wood	erous	plants	water	wild-	wild-	life
	crops	legumes	plants	trees	plants		areas	life	life	
357C:							 			
Frogcreek	Poor	Good	Good	Good	Good	Poor	Very   poor	Good	Good	Poor
	 	 	 	 			poor	 	 	
73B:			! 	İ			! 	! 	İ	
Stanberry	Very	Poor	Good	Good	Good	Poor	Very	Poor	Good	Very
	poor	ĺ	ĺ	İ	İ	İ	poor	ĺ	İ	poor
373C:						 	 			 
Stanberry	: -	Poor	Good	Good	Good	Very	Very	Poor	Good	Very
	poor	 	 	1		poor	poor	 	1	poor
73D:		 		1			 	 	1	
Stanberry	Very	Poor	Good	Good	Good	Very	Very	Poor	Good	Very
-	poor	į	į	İ	į	poor	poor	İ	İ	poor
905A:		!	[		[			<u> </u>		[
Cublake	Poor	Poor	Fair	Fair	Fair	Poor	Very	Poor	Fair	Very
							poor			poor
026A:		 	 	1		1	 	 	1	
/20A: Flink	Poor	  Fair	  Good	Good	Good	Poor	  Poor	  Fair	Good	Poor
111111										
943D:		İ		İ	İ	İ	ĺ	İ	İ	İ
Stanberry	Very	Poor	Good	Good	Good	Very	Very	Poor	Good	Very
	poor					poor	poor			poor
Greenwood		Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
	poor						 	 		
48A:		 	 	 		 	 	 	 	
Billyboy	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
				İ					İ	
70C:	į	į	j	į	į	į	İ	j	į	į
Keweenaw	Poor	Fair	Good	Good	Good	Very	Very	Fair	Good	Very
		!	[		!	poor	poor			poor
Page 4	   Badon	   made:		   Bades				 	   Bades	
Pence	rair	Fair	Fair	Fair	Fair	Very	Very	Fair	Fair	Very
	 	I I	 	1		poor	poor	 	1	poor
Greenwood	Verv	Poor	  Poor	Poor	Poor	Good	  Good	  Poor	Poor	Good
	poor	į	į	İ	i	İ	İ	j	İ	i
		İ	İ	İ	İ	İ		İ	İ	İ
70E:										
Keweenaw		Fair	Good	Good	Good	Very	Very	Poor	Good	Very
	poor					poor	poor			poor
Pence	Poor	  Fair	  Fair	  Fair	  Fair	Very	  Very	  Fair	  Fair	Very
- ence	15001	1.011	  -arr	Lair	Fair	Very   poor	very   poor	  rarr	Lair	Very   poor
				İ			2001		İ	
Greenwood	Very	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
	poor	İ	İ	İ	İ	İ		İ	İ	İ
070C:										-
Fremstadt	Poor	Fair	Good	Good	Good	Very	Very	Fair	Good	Very
				1		poor	poor		1	poor
Cress	   Fai∽	  Pai=	  Pai=	  Pai=	  Pai=	1702	17027-	   Pai∽	  Pai=	
CIESS	rair	Fair	Fair	Fair	Fair	Very	: -	Fair	Fair	Very
	1	1	1	1	1	poor	poor	I	1	poor

Table 17.--Wildlife Habitat--Continued

		Pote	ential f	or habit	at eleme	nts		Potenti	al as ha	bitat for-
Map symbol and soil name	Grain and seed	  Grasses   and	ceous	wood	erous	  Wetland  plants	water	wild-	Wood-   land   wild-	Wetland   wild-   life
	crops	legumes	plants	trees	plants	1	areas	life	life	1
1070D: Fremstadt	    Poor 	    Fair   	    Good 	    Good 	    Good 	  Very   poor	    Very   poor	     <b>Fair</b>   	  Good 	    Very   poor
Cress	Poor	  Fair 	  Fair 	Fair	Fair	Very   poor	Very   poor	Poor	Fair	Very   poor
1080B: Spoonerhill	    Poor 	    Fair 	    Good 	    Good 	    Good 	    Poor 	    Very   poor	    Fair 	    Good	    Very   poor
Spoonerhill, stony	  Poor 	  Fair 	  Good 	  Good 	  Good 	  Poor 	  Very   poor	  Fair 	  Good 	  Very   poor
Cress	  Fair   	  Fair   	  Fair   	  Fair 	  Fair   	  Very   poor	  Very   poor	  Fair   	  Fair 	  Very   poor
1653C: Stanberry	  Very   poor	    Poor 	    Good	  Good	  Good	  Very   poor	  Very   poor	    Poor	  Good	  Very   poor
Parkfalls	  Fair 	  Good 	  Good 	  Good 	  Good 	  Poor	  Poor 	  Good 	  Good 	  Poor 
Wozny	Very   poor	Poor	Fair 	Fair	Fair	Good	Good	Poor	Fair	Good
2015. Pits	   	   	   	 			   	   		 
2050. Landfill	   	   	   	   			   	   		   
3011A: Barronett	    Poor	    Fair	    Fair	    Fair	    Fair	    Good	    Good	    Fair	    Fair	    Good
3125A: Meehan	    Poor	    Fair	    Good	    Fair	    Fair	    Fair	    Fair	    Fair	  Fair	    Fair
3126A: Wurtsmith	    Poor	    Poor 	    Fair 	    Fair 	    Fair 	  Poor	  Very   poor	    Poor 	  Fair	  Very   poor
3276A: Au Gres	    Poor	    Fair 	    Good	    Good	    Good	    Poor	    Poor	     <b>Fair</b> 	    Good	    Poor
3312B: Glendenning, very stony	    Fair	    Fair	    Good	Good	Good	Fair	    Poor	    Good	Good	    Fair
Glendenning	  Fair 	  Fair 	  Good 	  Good 	  Good 	  Fair 	  Poor 	  Good 	  Good 	  Fair 
3336A: Fenander	  Fair	    Fair	    Fair	  Fair	Fair	Good	  Good	    Fair	Fair	  Good
3403A: Loxley	    Very   poor	    Poor 	    Poor 	    Poor 	    Poor 	  Good	    Good 	    Poor 	    Poor 	    Good 
Beseman	  Very   poor	  Poor 	  Poor 	  Poor 	  Poor 	  Good	  Good 	  Poor 	Poor	  Good 
Dawson	  Very   poor	  Poor 	  Poor 	  Poor 	  Poor 	  Good 	  Good 	  Poor 	Poor	  Good 

Table 17.--Wildlife Habitat--Continued

		Pote	ential f	or habit		Potential as habitat for				
Map symbol	Grain		Wild					Open-	Wood-	Wetland
and	and	Grasses	herba-	Hard-	Conif-	Wetland	Shallow	land	land	wild-
soil name	seed	and	ceous	wood	erous	plants	water	wild-	wild-	life
	crops	legumes	plants	trees	plants		areas	life	life	
424C:										
		Good	  Good	Good	  Good		   •••	  Good	Good	
Frogcreek	POOT	GOOG	Good	GOOG	GOOG	Poor	Very	Good	Good	Poor
	 		 	I I	 		poor	 	 	 
Magroc	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
Stinnett	  Fair	Good	  Good	Good	Good	Poor	  Very	  Good	Good	  Very
							poor			poor
Rock outcrop.	 		 		 			 	ļ	 
446A:	 	 	 		 	 		 	 	 
Newson	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Poor	Good
	į	į	İ	İ	į	į		: 	į	İ
448B:										
Grettum	Poor	Poor	Fair	Good	Good	Very	Very	Poor	Good	Very
						poor	poor			poor
448C:	 		 		 			 	 	
Grettum	Poor	Poor	Fair	Good	Good	Very	Very	Poor	Good	Very
	į	į	į	į	į	poor	poor		į	poor
516A:	 	]	 		 	 		 	 	 
Slimlake	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor
629B:	 		 		 	 		 	 	
Perida	Poor	Fair	Good	Fair	Fair	Poor	Poor	Fair	Fair	Poor
-W.	 	 	 		 	 			 	 
Miscellaneous water		İ		į	į	į			į	į
	 	 	 		 	 		 	[ [	 
Water	i	i	i	i	i	i		i i	i	i

## Table 18a.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Dwellings witho basements	ut	Dwellings with basements	l.	Small commercia   buildings	1
	Rating class and	Value	   Rating class and	Value	   Rating class and	Value
	limiting features		limiting features		limiting features	
	Ī	İ	İ	İ	ĺ	İ
3A:						
Totagatic			Very limited		Very limited	
	Subsidence	1.00	!	1.00	1	1.00
	Flooding	1.00	Flooding	1.00		1.00
	Depth to	1.00		1.00		1.00
	saturated zone		saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
Bowstring	  Very limited		  Very limited		  Very limited	
Dombering	Subsidence	1.00		1.00		1.00
	Flooding	1.00	!	1.00		1.00
	Depth to	1.00	Depth to	1.00		1.00
	saturated zone		saturated zone		saturated zone	i
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter	İ	organic matter	İ	organic matter	İ
	Ponding	1.00	Ponding	1.00	Ponding	1.00
Ausable		1	Very limited		Very limited	
	Subsidence	1.00	!	1.00		1.00
	Flooding	1.00		1.00		1.00
	Depth to	1.00		1.00		1.00
	saturated zone		saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
22A:	 		 		 	
Comstock	  Verv limited		  Very limited		  Very limited	i
33	Depth to	1.00	: -	1.00		1.00
	saturated zone		saturated zone		saturated zone	i
	Shrink-swell	0.50		i	Shrink-swell	0.50
	j	į	j	į	j	į
24A:						
Poskin	Very limited		Very limited		Very limited	
	Depth to	1.00		1.00		1.00
	saturated zone		saturated zone		saturated zone	ļ
0.00						
27A: Scott Lake	  Not limited		  Tom: limited		  Not limited	
Scott Lake	Not illited		Very limited   Depth to	0.99	Not illited	
	 		saturated zone	0.99	 	
						i
28B:		i		i		i
Haugen, very stony	Somewhat limited	İ	  Very limited	į	Somewhat limited	İ
	Depth to	0.39	Depth to	1.00	Depth to	0.39
	saturated zone		saturated zone		saturated zone	
	!	ļ	!		!	
Haugen		'	Very limited		Somewhat limited	1
	Depth to	0.39	Depth to	1.00	: -	0.39
	saturated zone		saturated zone		saturated zone	
Posholt work store	  Not limited	I	  Not limited		  Not limited	1
Rosholt, very stony	  MOC TIMITCEG	I	  MOC TIMITCEG		Not limited	1
Rosholt	  Not limited		  Not limited		  Not limited	i
	1	!		!		1

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		   Small commercia   buildings	al
	Rating class and   limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Ţ.				1
28C: Haugen, very stony	  Somewhat limited   Depth to	0.39	  Very limited   Depth to	    1.00	  Very limited   Slope	1.00
	saturated zone	0.04	saturated zone	0.04	Depth to saturated zone	0.39
Haugen	  Somewhat limited   Depth to	    0.39	  Very limited   Depth to	    1.00	  Very limited   Slope	    1.00
	saturated zone	0.04	saturated zone	0.04	Depth to saturated zone	0.39
Rosholt, very stony	  Somewhat limited   Slope	0.04	  Somewhat limited   Slope	0.04	  Very limited   Slope	1.00
Rosholt	  Somewhat limited   Slope	0.04	  Somewhat limited   Slope	0.04	  Very limited   Slope	1.00
33B:	 	i i		 	 	l l
Chetek	  Not limited 	 	  Not limited 	; 	  Not limited 	
33C: Chetek	  Somewhat limited   Slope 	    0.04	  Somewhat limited   Slope	    0.04	  Very limited   Slope	    1.00
38A: Rosholt	    Not limited 		    Not limited 	     	  Not limited 	   
38B: Rosholt	  Not limited 	   	  Not limited 	   	  Not limited 	
38C: Rosholt	  Somewhat limited   Slope 	0.04	  Somewhat limited   Slope	    0.04	  Very limited   Slope	1.00
38D: Rosholt	  Very limited   Slope 	1.00	  Very limited   Slope	    1.00	  Very limited   Slope	    1.00
42D:	İ	į		į		į
Amery	Very limited   Slope 	  1.00 	Very limited   Slope 	  1.00 	Very limited   Slope 	1.00
43B: Antigo	  Not limited	į Į	  Not limited	į Į	  Not limited	Ì
43C:	 		 		 	
Antigo	Somewhat limited   Slope	0.37	Somewhat limited   Slope	0.37	  Very limited   Slope	1.00
43D:						
Antigo	Very limited   Slope	1.00	  Very limited   Slope	1.00	  Very limited   Slope	1.00
48A:	[ 		[ 		[ 	
Brill	Somewhat limited   Depth to   saturated zone	0.98	  Very limited   Depth to   saturated zone	  1.00 	Somewhat limited   Depth to   saturated zone	0.98

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements	ut	Dwellings with basements		Small commercia   buildings	1
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
63A: Crystal Lake	  Somewhat limited   Shrink-swell   Depth to   saturated zone	      0.50  0.39	Very limited Depth to saturated zone	      1.00   	  Somewhat limited  Shrink-swell  Depth to   saturated zone	    0.50  0.39
63B: Crystal Lake	  Somewhat limited   Shrink-swell   Depth to   saturated zone	    0.50  0.39 	· -	    1.00   	  Somewhat limited   Shrink-swell   Depth to   saturated zone	  0.50  0.39
63C: Crystal Lake	Somewhat limited   Shrink-swell   Depth to   saturated zone   Slope	0.50	  Very limited   Depth to   saturated zone   Slope	1.00	  Very limited   Slope   Shrink-swell   Depth to   saturated zone	  1.00  0.50  0.39
63E: Crystal Lake	  Very limited   Slope   Shrink-swell	    1.00  0.50 	  Very limited   Slope   Depth to   saturated zone	    1.00  0.99 	  Very limited   Slope   Shrink-swell 	  1.00  0.50
64A: Totagatic	  Very limited   Subsidence   Flooding   Depth to   saturated zone   Ponding	  1.00  1.00  1.00 	Flooding Depth to saturated zone	  1.00  1.00  1.00 	Flooding   Depth to   saturated zone	  1.00  1.00  1.00 
Winterfield	  Very limited   Flooding   Depth to   saturated zone	    1.00  1.00 	  Very limited   Flooding   Depth to   saturated zone	  1.00  1.00 		  1.00  1.00 
69B: Keweenaw	  Not limited	<u>.</u>	  Not limited	<u> </u> 	  Not limited	į Į
Sayner	  Not limited 	   	  Not limited 		  Not limited 	   
Vilas	Not limited	   	Not limited		  Not limited 	į Į
69C: Keweenaw	  Somewhat limited   Slope	    0.16	  Somewhat limited   Slope	    0.16	  Very limited   Slope	1.00
Sayner	Somewhat limited   Slope	    0.16	Somewhat limited   Slope	0.16	  Very limited   Slope	1.00
Vilas	  Somewhat limited   Slope	    0.16	  Somewhat limited   Slope	    0.16	  Very limited   Slope	1.00
69E: Keweenaw	    Very limited   Slope 	      1.00	    Very limited   Slope 	      1.00	    Very limited   Slope 	      1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		   Small commercia   buildings	1
	Rating class and	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
69E: Sayner	    Very limited   Slope	      1.00	    Very limited   Slope	      1.00	    Very limited   Slope	
Vilas	  Very limited   Slope	    1.00	  Very limited   Slope	1.00	  Very limited   Slope	1.00
74B: Vilas	    Not limited 	     	    Not limited 	     	    Not limited 	   
74C: Vilas	    Somewhat limited   Slope	      0.37	    Somewhat limited   Slope	    0.37	  Very limited   Slope	1.00
74D: Vilas	  Very limited   Slope 	      1.00	  Very limited   Slope 	    1.00	  Very limited   Slope	1.00
100B: Menahga	  Not limited 	   	  Not limited 	 	  Not limited 	     
100C: Menahga	  Somewhat limited   Slope	    0.04	  Somewhat limited   Slope	0.04	  Very limited   Slope	1.00
100D: Menahga	    Very limited   Slope 	      1.00	    Very limited   Slope 	      1.00	    Very limited   Slope 	1.00
127D: Amery	  Very limited   Slope	    1.00	  Very limited   Slope	    1.00	  Very limited   Slope	1.00
Rosholt	  Very limited   Slope 	    1.00	  Very limited   Slope 	1.00	  Very limited   Slope 	1.00
127E: Amery	  Very limited   Slope	    1.00	  Very limited   Slope	    1.00	  Very limited   Slope	1.00
Rosholt	  Very limited   Slope	    1.00	  Very limited   Slope	1.00	  Very limited   Slope	1.00
156B: Magnor, very stony	  Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	1.00
Magnor	Very limited Depth to saturated zone	    1.00   	  Very limited   Depth to   saturated zone 	    1.00 	  Very limited   Depth to   saturated zone	1.00
157B: Freeon, very stony	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	1.00
Freeon	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	   Dwellings witho   basements	ut	   Dwellings with   basements		   Small commercia   buildings	1
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
157C: Freeon, very stony	Very limited Depth to saturated zone Slope	    1.00    0.04	Very limited Depth to saturated zone Slope	    1.00    0.04	Very limited Depth to saturated zone Slope	    1.00    1.00
Freeon	  Very limited   Depth to   saturated zone   Slope	  1.00    0.04	   Very limited   Depth to   saturated zone   Slope	  1.00    0.04	   Very limited   Depth to   saturated zone   Slope	1.00
160A: Oesterle	  Very limited   Depth to   saturated zone	      1.00 	  Very limited   Depth to   saturated zone	      1.00 	  Very limited   Depth to   saturated zone	    1.00
182B: Padus	    Not limited	 	    Not limited	   	    Not limited	
182C: Padus	  Somewhat limited   Slope	    0.37	  Somewhat limited   Slope	    0.37	    Very limited   Slope	1.00
192A: Worcester	  Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	1.00
193A: Minocqua	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	1.00
215B: Pence	    Not limited	   	    Not limited		    Not limited	
215C: Pence	  Somewhat limited   Slope 	      0.37	  Somewhat limited   Slope	      0.37	    Very limited   Slope	1.00
215D: Pence	  Very limited   Slope	    1.00	  Very limited   Slope 	    1.00	  Very limited   Slope 	1.00
315A: Rib	  Very limited   Depth to   saturated zone   Ponding   Shrink-swell	  1.00    1.00  0.50	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	  Very limited   Depth to   saturated zone   Ponding   Shrink-swell	  1.00    1.00  0.50
337A: Plover	  Very limited   Depth to   saturated zone	      1.00 	  Very limited   Depth to   saturated zone	      1.00 	  Very limited   Depth to   saturated zone	    1.00
368B: Mahtomedi	    Not limited	   	    Not limited	   	    Not limited	   
Cress	Not limited		  Not limited 	   	  Not limited 	

Table 18a.--Building Site Development--Continued

Map symbol and soil name	   Dwellings witho   basements 	ut	   Dwellings with   basements 		   Small commercia   buildings 	1
	Rating class and	Value	Rating class and	Value		Value
	limiting features	<u>                                     </u>	limiting features	<u> </u>	limiting features	1
368C: Mahtomedi	  Somewhat limited   Slope 	    0.04	  Somewhat limited   Slope 	    0.04	  Very limited   Slope	    1.00
Cress	Somewhat limited   Slope	0.04	  Somewhat limited   Slope	0.04	  Very limited   Slope	1.00
368D: Mahtomedi	    Very limited   Slope	      1.00	    Very limited   Slope	      1.00	  Very limited   Slope	1.00
Cress	  Very limited   Slope	1   1.00	  Very limited   Slope	    1.00	  Very limited   Slope	1.00
371A: Croswell	  Somewhat limited   Depth to   saturated zone	    0.39 	  Very limited   Depth to   saturated zone	    1.00	  Somewhat limited   Depth to   saturated zone	0.39
380B: Cress	    Not limited		    Not limited	   	    Not limited	
Rosholt	    Not limited	j I	    Not limited	j I	    Not limited	į į
	į	į		į		į
380C: Cress	  Somewhat limited   Slope	    0.04	!	    0.04	  Very limited   Slope	1.00
Rosholt	  Somewhat limited   Slope	    0.04	  Somewhat limited   Slope	    0.04	  Very limited   Slope	1.00
380D: Cress	    Very limited   Slope	1.00	  Very limited   Slope	    1.00	  Very limited   Slope	1.00
Rosholt	  Very limited   Slope	1.00	  Very limited   Slope	    1.00	  Very limited   Slope	1.00
383B: Mahtomedi	    Not limited 	     	    Not limited 	     	    Not limited 	   
383C: Mahtomedi	  Somewhat limited   Slope	    0.04	  Somewhat limited   Slope	    0.04	  Very limited   Slope	1.00
383D: Mahtomedi	    Very limited   Slope 	      1.00	    Very limited   Slope 	      1.00	    Very limited   Slope 	1.00
396B: Friendship	  Not limited 	     	  Somewhat limited   Depth to   saturated zone	    0.35	  Not limited 	
Wurtsmith	  Somewhat limited   Depth to   saturated zone	    0.39 	  Very limited   Depth to   saturated zone	    1.00 	  Somewhat limited   Depth to   saturated zone	    0.39 
Grayling	  Not limited		  Not limited	   	  Not limited	

Table 18a.--Building Site Development--Continued

Map symbol and soil name	   Dwellings witho   basements	ut	   Dwellings with   basements		   Small commercial   buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
397A: Perchlake	  Very limited   Depth to   saturated zone	      1.00	  Very limited   Depth to   saturated zone	      1.00	  Very limited   Depth to   saturated zone	
399B: Grayling	    Not limited	     	    Not limited	     	    Not limited	
399C: Grayling	  Somewhat limited   Slope 	    0.04	  Somewhat limited   Slope 	    0.04	  Very limited   Slope 	1.00
399D: Grayling	  Very limited   Slope	    1.00	  Very limited   Slope	    1.00	  Very limited   Slope 	    1.00
405A: Lupton	    Very limited	      1.00	    Very limited	      1.00	    Very limited	
	Subsidence Depth to saturated zone Content of	1.00  1.00      1.00	Subsidence   Depth to   saturated zone   Content of	1.00  1.00      1.00	Subsidence   Depth to   saturated zone   Content of	1.00  1.00    1.00
	organic matter Ponding	1.00	content of   organic matter   Ponding	1.00	organic matter Ponding	1.00
Cathro	Very limited   Subsidence   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00  1.00    1.00 	   Very limited   Subsidence   Depth to   saturated zone   Ponding	  1.00  1.00    1.00		  1.00  1.00    1.00
Tawas	   Very limited   Subsidence   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00  1.00    1.00 	   Very limited   Subsidence   Depth to   saturated zone   Ponding	  1.00  1.00    1.00	Very limited   Subsidence   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00  1.00    1.00
406A: Loxley		<u>.</u> !	    -	   	      Very limited	
LOATE	Subsidence Depth to saturated zone Content of organic matter Ponding	1.00  1.00    1.00    1.00	Very limited  Subsidence  Depth to  saturated zone  Content of  organic matter  Ponding	1.00  1.00    1.00    1.00	Subsidence   Depth to   saturated zone   Content of   organic matter   Ponding	1.00  1.00    1.00 
407A: Seelyeville	  Very limited   Subsidence   Depth to   saturated zone   Content of   organic matter   Ponding	    1.00  1.00    1.00    1.00	  Very limited   Subsidence   Depth to   saturated zone   Content of   organic matter   Ponding	    1.00  1.00    1.00    1.00	  Very limited   Subsidence   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00  1.00    1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		Small commercial   buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
407A:	1		 		 	
Markey	Very limited   Depth to   saturated zone	1.00	  Very limited   Depth to   saturated zone	1.00	  Very limited   Depth to   saturated zone	1.00
	Content of   organic matter	1.00	Ponding	1.00	Content of   organic matter	1.00
	Ponding	1.00			Ponding	1.00
410A:			 		 	
Seelyeville	  Very limited	i	  Very limited	į	  Very limited	i
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of   organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
				i		i
Cathro	Very limited		Very limited		Very limited	
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone Content of	1.00	saturated zone	1.00	saturated zone Content of	1.00
	organic matter	1	Foliating	1	organic matter	1
	Ponding	1.00		i	Ponding	1.00
	[					1
412A:						
Rifle	Very limited   Depth to	1.00	Very limited   Depth to	1.00	Very limited   Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter	j	organic matter	į	organic matter	į
	Ponding	1.00	Ponding	1.00	Ponding	1.00
Tacoosh	  Very limited		  Very limited		  Very limited	
racoobn	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	į	saturated zone	į
	Content of	1.00	Ponding	1.00	Content of	1.00
	organic matter			ļ	organic matter	
	Ponding	1.00	 		Ponding	1.00
415A:		i				
Greenwood	Very limited	i	  Very limited	į	  Very limited	i
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of   organic matter	1.00	Content of   organic matter	1.00	Content of organic matter	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	j	İ		İ		į
439B:		1		ļ		1
Graycalm	NOT limited		Not limited	 	Not limited	1
Menahga	Not limited		  Not limited 	   	  Not limited	
439C:						İ
Graycalm	Somewhat limited	İ	Somewhat limited	į	Very limited	İ
	Slope	0.04	Slope	0.04	Slope	1.00
Monahga			  Comowhat limited		  Vorus limited	
Menahga	Slope	0.04	Somewhat limited   Slope	0.04	Very limited   Slope	1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without   basements		Dwellings with basements		   Small commercial   buildings	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	<u> </u>	limiting features	
439D:			l			
Graycalm	  Very limited		  Very limited	l I	  Very limited	
Graycarm	Slope	1.00	Slope	1.00	Slope	1.00
	j	į	· -	į	i -	j
Menahga	-	1	Very limited	:	Very limited	1
	Slope	1.00	Slope	1.00	Slope	1.00
441C:	 		 	l I	 	l I
Freeon	  Very limited		  Very limited	i	  Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	ĺ	saturated zone	Ì
	Slope	0.37	Slope	0.37	Slope	1.00
G. N.	 		 			
Cathro	Very limited   Subsidence	1.00	Very limited   Subsidence	1.00	Very limited   Subsidence	1.00
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of	1.00	Ponding	1.00	Content of	1.00
	organic matter	į		į	organic matter	İ
	Ponding	1.00			Ponding	1.00
442C:			  -			
Haugen	  Somewhat limited		  Very limited	l I	  Somewhat limited	
naagen	Depth to	0.39	Depth to	1.00	Slope	0.88
	saturated zone		saturated zone	i	Depth to	0.39
	į	į		į	saturated zone	į
C						
Greenwood	Depth to	1.00	Very limited   Depth to	1.00	Very limited   Depth to	1.00
	saturated zone		saturated zone	1.00	saturated zone	1
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter	į	organic matter	į	organic matter	į
	Ponding	1.00	Ponding	1.00	Ponding	1.00
4420						
443D: Amery	  Verv limited		  Very limited	l I	  Very limited	
12.1027	Slope	1.00	Slope	1.00	Slope	1.00
	İ	İ	_	İ	İ	İ
Greenwood	: -	:	Very limited	1	Very limited	1
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone Content of	1.00	saturated zone Content of	1.00	saturated zone Content of	1.00
	organic matter	1	organic matter	1	organic matter	1
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	İ	į		į	İ	i
461A:	!	ļ		!	!	ļ
Bowstring		:	Very limited		Very limited	
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Flooding   Depth to	1.00	Flooding   Depth to	1.00	Flooding   Depth to	1.00
	saturated zone		saturated zone		saturated zone	1.00
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter	İ	organic matter	İ	organic matter	İ
	Ponding	1.00	Ponding	1.00	Ponding	1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without       basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
484A: Greenwood	    Very limited   Depth to   saturated zone	      1.00	    Very limited   Depth to   saturated zone	      1.00	    Very limited   Depth to   saturated zone	      1.00
	Content of organic matter Ponding	1.00	Content of organic matter Ponding	1.00    1.00	Content of organic matter Ponding	1.00    1.00
Beseman	Very limited Depth to saturated zone Content of	  1.00    1.00	saturated zone	  1.00    1.00	saturated zone	  1.00    1.00
	organic matter Subsidence Ponding	  1.00  1.00	Ponding	1.00	!	  1.00  1.00
495B: Karlsborg	  Somewhat limited   Depth to   saturated zone	    0.98	  Very limited   Depth to   saturated zone	    1.00	  Somewhat limited   Depth to   saturated zone	0.98
Grettum	  Not limited   	     	  Somewhat limited   Depth to   saturated zone	    0.35 	  Not limited   	
Perida	  Not limited   	     	Somewhat limited   Depth to   saturated zone	    0.82   	  Not limited   	     
495C: Karlsborg	  Somewhat limited   Depth to   saturated zone   Slope	  0.98    0.04	saturated zone	    1.00    0.04	Depth to	  1.00  0.98
Grettum	  Somewhat limited   Slope   	    0.04   	  Somewhat limited   Depth to   saturated zone   Slope	  0.35    0.04	  Very limited   Slope 	1.00
Perida	Somewhat limited   Slope  -	    0.04   	Somewhat limited   Depth to   saturated zone   Slope	  0.82    0.04	  Very limited   Slope 	1.00
495D: Karlsborg	  Very limited   Slope   Depth to   saturated zone	    1.00  0.98	saturated zone	    1.00    1.00	  Very limited   Slope   Depth to   saturated zone	1.00
Grettum	  Very limited   Slope 	 	  Very limited   Slope   Depth to   saturated zone	    1.00  0.35	  Very limited   Slope 	1.00
Perida	  Very limited   Slope 	    1.00   	  Very limited   Slope   Depth to   saturated zone	    1.00  0.82	  Very limited   Slope 	1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		Small commercia   buildings 	al
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u> 	limiting features	<u> </u>	limiting features	1
497A:	 		 		 	
Meenon	Depth to	1.00	Very limited   Depth to	1.00	Very limited   Depth to	1.00
	saturated zone		saturated zone		saturated zone	
515A:			 		 	
Manitowish	Not limited	İ	  Very limited	İ	Not limited	i
		ĺ	Depth to	0.99	İ	ĺ
			saturated zone			
521A:			 		 	
Dody	Very limited	Ì	Very limited		Very limited	Ì
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
	Ponding	1.00	Ponding 	1.00	Ponding 	1.00
524E:	į	į		į	į	į
Rock outcrop	Not rated		Not rated		Not rated	
Frogcreek	  Very limited		  Very limited		  Very limited	
_	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
		 	l		Slope	1.00
Metonga	  Very limited		  Very limited		  Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to hard	0.42	Depth to hard	1.00	Depth to hard	0.42
	bedrock	l I	bedrock		bedrock	
542B:						
Haugen, very stony	Somewhat limited		Very limited		Somewhat limited	
	Depth to	0.39	Depth to	1.00	Depth to	0.39
	saturated zone	 	saturated zone		saturated zone	
Haugen	Somewhat limited		  Very limited		Somewhat limited	i
	Depth to	0.39	Depth to	1.00	Depth to	0.39
	saturated zone		saturated zone		saturated zone	
542C:						
Haugen, very stony	!		Very limited		Very limited	
	Depth to	0.39		1.00		1.00
	saturated zone		saturated zone	0.04	Depth to	0.39
	Slope 	0.04	Slope 	0.04	saturated zone	
Haugen	1	İ	  Very limited	İ	  Very limited	į
	Depth to	0.39	: -	1.00	Slope	1.00
	saturated zone		saturated zone	0.04	Depth to	0.39
	Slope 	0.04	Slope 	0.04	saturated zone	
543B:	į	į		į	į	į
Anigon	Not limited		Not limited		Not limited	
543C2:	 		 		 	
Anigon			  Somewhat limited		  Very limited	İ
-	Slope	0.04	'	0.04	Slope	1.00
						İ

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		Small commercial   buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
544F: Menahga	    Very limited   Slope	      1.00	    Very limited   Slope	      1.00	    Very limited   Slope	1.00
Mahtomedi	  Very limited   Slope	1.00	  Very limited   Slope	1.00	  Very limited   Slope	1.00
555A: Fordum	  Very limited   Flooding   Depth to   saturated zone   Ponding	 	  Very limited   Flooding   Depth to   saturated zone   Ponding	 		  1.00  1.00    1.00
574B: Sayner	    Not limited	     	    Not limited	   	    Not limited	
574C: Sayner	    Somewhat limited   Slope 	      0.37	    Somewhat limited   Slope 	      0.37	  Very limited   Slope 	1.00
574E: Sayner	  Very limited   Slope	    1.00	  Very limited   Slope	1.00	  Very limited   Slope	1.00
579B: Parkfalls	    Very limited   Depth to   saturated zone	      1.00	    Very limited   Depth to   saturated zone	      1.00	  Very limited   Depth to   saturated zone	1.00
600A: Haplosaprists	    Not rated 	     	    Not rated 	     	    Not rated 	     
Psammaquents615B:	Not rated   	; 	Not rated   	; 	Not rated 	į Į
Cress	  Not limited 		Not limited		  Not limited 	
615C: Cress	  Somewhat limited   Slope 	    0.04	  Somewhat limited   Slope 	    0.04	  Very limited   Slope 	1.00
615D: Cress	  Very limited   Slope	    1.00	    Very limited   Slope	    1.00	  Very limited   Slope	1.00
623A: Capitola	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	1.00
624A: Ossmer	  Very limited   Depth to   saturated zone	      1.00 	  Very limited   Depth to   saturated zone	      1.00 	  Very limited   Depth to   saturated zone	1.00
632A: Aftad	  Somewhat limited   Depth to   saturated zone	    0.39 	  Very limited   Depth to   saturated zone	    1.00 	  Somewhat limited   Depth to   saturated zone	0.39

Table 18a.--Building Site Development--Continued

Dwellings without basements		Dwellings with basements		Small commercial   buildings	
Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
Somewhat limited Depth to saturated zone	:	-	!	!	0.39
Somewhat limited Depth to saturated zone Slope	    0.39    0.04	  Very limited   Depth to   saturated zone   Slope	1.00	Slope   Depth to	  1.00  0.39
Very limited Slope			'		1.00
Very limited Slope	:	-	!		1.00
Somewhat limited Depth to saturated zone	1		1	1	0.98
Somewhat limited Slope	0.37	Somewhat limited   Slope	:	: -	1.00
Somewhat limited Slope	!	!	0.37	  Very limited   Slope	1.00
Very limited Slope	:	-	:	: -	1.00
Very limited Slope	1.00	  Very limited   Slope	,		1.00
Somewhat limited Depth to saturated zone	    0.39	  Very limited   Depth to   saturated zone	    1.00	  Somewhat limited   Depth to   saturated zone	0.39
Somewhat limited Depth to saturated zone		_		•	0.39
	<u> </u>				i
Somewhat limited Depth to saturated zone		_	:	!	0.39
Not limited		Not limited		Not limited	
Not limited	     	Depth to	      0.99	    Not limited 	
	Rating class and limiting features  Somewhat limited Depth to saturated zone  Somewhat limited Depth to saturated zone Slope  Very limited Slope  Very limited Slope  Somewhat limited Depth to saturated zone  Somewhat limited Slope  Somewhat limited Slope  Somewhat limited Slope  Somewhat limited Slope  Somewhat limited Slope  Very limited Slope  Somewhat limited Slope  Somewhat limited Slope  Somewhat limited Depth to saturated zone  Somewhat limited Depth to saturated zone  Somewhat limited Depth to saturated zone  Somewhat limited Depth to saturated zone  Not limited	Rating class and   Value   limiting features    Somewhat limited   Depth to   0.39   saturated zone    Somewhat limited   Depth to   0.39   saturated zone   Slope   0.04    Very limited   Slope   1.00    Very limited   Slope   1.00   Somewhat limited   Depth to   0.98   saturated zone   Somewhat limited   Slope   0.37    Somewhat limited   Slope   1.00   Very limited   Slope   1.00   Very limited   Slope   0.37    Somewhat limited   Slope   1.00   Very limited   Slope   1.00   Somewhat limited   Slope   1.00   Somewhat limited   Slope   1.00   Somewhat limited   Depth to   saturated zone   Somewhat limited   Depth to   saturated zone   Somewhat limited   Depth to   saturated zone   Somewhat limited   Depth to   saturated zone   Not limited   Not li	Rating class and limiting features   Value   Rating class and limiting features   Very limited   Depth to saturated zone   Somewhat limited   Depth to saturated zone   Slope   Slope   Very limited   Very limited   Slope   Very limited   Slope   Very limited   Slope   Very limited   Slope   Somewhat limited   Slope   Very limited   Slope   Somewhat limited   Slope   Somewhat limited   Slope   Somewhat limited   Slope   Somewhat limited   Slope   Somewhat limited   Slope   Somewhat limited   Slope   Somewhat limited   Slope   Somewhat limited   Slope   Somewhat limited   Slope   Somewhat limited   Slope   Somewhat limited   Slope   Somewhat limited   Slope   Somewhat limited   Slope   Slope   Very limited   Slope   Slope   Very limited   Slope   Slope   Very limited   Slope   Slope   Very limited   Slope   Somewhat limited   Slope   Very limited   Slope   Somewhat limited   Very limited   Slope   Somewhat limited   Very limited   Slope   Somewhat limited   Very limited   Somewhat limited   Somewhat limited   Very limited   Somewhat limited   Somewhat limited   Very limited   Somewhat limited   Somewhat limited   Very limited   Somewhat limited   Somewhat limited   Somewhat limited   Somewhat limited   Somewhat limited   Somewhat limited   Somewhat limited   Somewhat limited   Somewhat limited   Somewhat limited   Somewhat limited   Somewhat limit	Rating class and limiting features  Somewhat limited Depth to saturated zone Slope Somewhat limited Slope Somewhat limited Depth to saturated zone Somewhat limited Slope Somewhat limited Depth to saturated zone Somewhat limited Slope Somewhat limited	Rating class and limited   Very limited   Very limited   Slope   1.00   Slope   Somewhat limited   Very limited

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		   Small commercia   buildings	1
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
706A: Winterfield	  Very limited   Flooding   Depth to   saturated zone	    1.00  1.00	  Very limited   Flooding   Depth to   saturated zone	    1.00  1.00		1.00
Totagatic	  Very limited   Flooding   Depth to   saturated zone   Ponding	  1.00  1.00    1.00	   Very limited   Flooding   Depth to   saturated zone   Ponding	  1.00  1.00    1.00	Depth to saturated zone	  1.00  1.00    1.00
724A: Rib	  Very limited   Depth to   saturated zone   Ponding   Shrink-swell	  1.00    1.00  0.50	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	saturated zone	  1.00    1.00  0.50
Rock outcrop	Not rated		  Not rated		  Not rated	
726B: Sissabagama	  Not limited   	       	  Very limited   Depth to   saturated zone	    0.99	  Not limited 	
733A: Wozny	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	saturated zone	1.00
771A: Lenroot	  Somewhat limited   Depth to   saturated zone	      0.39 	  Very limited   Depth to   saturated zone	      1.00	  Somewhat limited   Depth to   saturated zone	0.39
827A: Scoba	  Somewhat limited   Depth to   saturated zone	    0.39 	  Very limited   Depth to   saturated zone	    1.00   	  Somewhat limited   Depth to   saturated zone	0.39
853C: Frogcreek	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00   	  Very limited   Depth to   saturated zone   Slope	  1.00    1.00
Stinnett	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	    1.00
Wozny	   Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	   Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	   Very limited   Depth to   saturated zone   Ponding	  1.00    1.00
856B: Stinnett	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		Small commercial   buildings	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
	limiting features	<u> </u>	limiting reatures	<u> </u>	limiting reatures	1
857B: Frogcreek	  Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	1.00
857C:	 				 	İ
Frogcreek	Very limited   Depth to   saturated zone   Slope	  1.00    0.16	Very limited Depth to saturated zone Slope	  1.00    0.16	Very limited Depth to saturated zone Slope	  1.00    1.00
873B:	 		 		 	
Stanberry	  Somewhat limited   Depth to   saturated zone	  0.39 	   Very limited   Depth to   saturated zone	  1.00 	Somewhat limited   Depth to   saturated zone	0.39
873C: Stanberry	  Somewhat limited   Depth to   saturated zone   Slope	0.39	  Very limited   Depth to   saturated zone   Slope	  1.00    0.37	  Very limited   Slope   Depth to   saturated zone	  1.00  0.39
873D:					 	
Stanberry	Very limited   Slope   Depth to   saturated zone	  1.00  0.39	Very limited   Slope   Depth to   saturated zone	  1.00  1.00	Very limited Slope Depth to saturated zone	1.00
905A: Cublake	    Not limited		    Very limited	!	    Not limited	
	 		Depth to saturated zone	0.99 	 	
926A: Flink	  Very limited   Depth to   saturated zone	      1.00	  Very limited   Depth to   saturated zone	      1.00	  Very limited   Depth to   saturated zone	
943D:	 		 		 	
Stanberry	Very limited   Slope   Depth to   saturated zone	  1.00  0.39 	Very limited   Depth to   saturated zone   Slope	  1.00    1.00	Very limited   Slope   Depth to   saturated zone	  1.00  0.39
Greenwood	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00
948A: Billyboy	  Somewhat limited   Depth to   saturated zone	      0.98 	  Very limited   Depth to   saturated zone	      1.00 	  Somewhat limited   Depth to   saturated zone	      0.98
970C: Keweenaw	    Somewhat limited   Slope	      0.37	    Somewhat limited   Slope	      0.37	    Very limited   Slope	1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		Small commercia   buildings	al
	Rating class and	Value	Rating class and   limiting features		Rating class and   limiting features	Value
970C:	 		 			
Pence	Somewhat limited   Slope	0.37	Somewhat limited   Slope	0.37	Very limited   Slope	1.00
Greenwood	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	saturated zone Content of organic matter	  1.00    1.00    1.00	saturated zone Content of organic matter	  1.00    1.00 
970E: Keweenaw	  Very limited   Slope	1.00	  Very limited   Slope	    1.00	  Very limited   Slope	1.00
Pence	  Very limited   Slope 	1.00	  Very limited   Slope 	    1.00	  Very limited   Slope 	1.00
Greenwood	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	1.00	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00 
1070C:	 		 			
Fremstadt	Somewhat limited   Slope	0.16	Somewhat limited   Slope	  0.16	Very limited   Slope	1.00
Cress	Somewhat limited   Slope	!	Somewhat limited   Slope	0.04	  Very limited   Slope	1.00
1070D:	 		 	 	 	
Fremstadt	Very limited   Slope	1	Very limited   Slope	1	Very limited   Slope	1.00
Cress	  Very limited   Slope	1.00	  Very limited   Slope	1.00	  Very limited   Slope	1.00
1080B:	 		 			
Spoonerhill	Somewhat limited   Depth to   saturated zone	0.39	Very limited   Depth to   saturated zone	  1.00 	Somewhat limited   Depth to   saturated zone	0.39
Spoonerhill, stony	  Somewhat limited   Depth to   saturated zone	0.39	  Very limited   Depth to   saturated zone	    1.00 	  Somewhat limited   Depth to   saturated zone	0.39
Cress	  Not limited	İ	  Not limited		Not limited	ļ
1653C:	 		 		! 	
Stanberry	Somewhat limited   Depth to   saturated zone   Slope	  0.39    0.04	saturated zone	  1.00    0.04	Very limited   Slope   Depth to   saturated zone	  1.00  0.39 
Parkfalls	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00 

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
1653C: Wozny	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00
2015: Pits	    Not rated 	     	    Not rated 	     	    Not rated 	     
2050: Landfill	  Not rated 	   	  Not rated 	   	  Not rated 	     
3011A: Barronett	Very limited Depth to saturated zone Ponding Shrink-swell	  1.00    1.00  0.50	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	  Very limited   Depth to   saturated zone   Ponding   Shrink-swell	  1.00    1.00  0.50
3125A: Meehan	  Very limited   Depth to   saturated zone	      1.00	  Very limited   Depth to   saturated zone	      1.00	  Very limited   Depth to   saturated zone	    1.00
3126A: Wurtsmith	  Somewhat limited   Depth to   saturated zone	      0.39 	  Very limited   Depth to   saturated zone	      1.00	  Somewhat limited   Depth to   saturated zone	      0.39
3276A: Au Gres	  Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	1.00
3312B: Glendenning, very stony Glendenning	Depth to saturated zone	1.00	saturated zone	1.00	saturated zone	    1.00      1.00
3336A: Fenander	Very limited Depth to saturated zone Ponding	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	      1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00
3403A: Loxley	Very limited   Subsidence   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00  1.00    1.00    1.00	Very limited   Subsidence   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00  1.00    1.00    1.00	saturated zone	  1.00  1.00    1.00    1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		Small commercia   buildings	1
	Rating class and	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
3403A: Beseman	    Very limited   Depth to	      1.00	    Very limited   Depth to	      1.00	  Very limited   Depth to	      1.00
	saturated zone Content of organic matter Subsidence Ponding	  1.00    1.00  1.00	saturated zone Subsidence Ponding	  1.00  1.00 	saturated zone Content of organic matter Subsidence Ponding	  1.00    1.00  1.00
Dawson	  Very limited   Subsidence   Depth to   saturated zone	  1.00  1.00	  Very limited   Subsidence   Depth to   saturated zone	  1.00  1.00	  Very limited   Subsidence   Depth to   saturated zone	  1.00  1.00
	Content of   organic matter   Ponding	1.00    1.00	Ponding     	1.00   	Content of   organic matter   Ponding	1.00    1.00
3424C: Frogcreek	    Very limited   Depth to   saturated zone	      1.00	    Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	1.00
Magroc	  Very limited   Depth to   saturated zone	      1.00   	   Very limited   Depth to   saturated zone   Depth to hard   bedrock	    1.00    0.42	Slope 	1.00      1.00 
Stinnett	  Very limited   Depth to   saturated zone	    1.00   	  Very limited   Depth to   saturated zone	    1.00   	  Very limited   Depth to   saturated zone	1.00
Rock outcrop	Not rated 		Not rated 		Not rated 	
3446A: Newson	   Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	   Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	   Very limited   Depth to   saturated zone   Ponding	  1.00    1.00
3448B: Grettum	  Not limited   	       	  Somewhat limited   Depth to   saturated zone	    0.35 	  Not limited   	
3448C: Grettum	  Somewhat limited   Slope   	    0.04   	  Somewhat limited   Depth to   saturated zone   Slope	  0.35    0.04	  Very limited   Slope 	  1.00 
3516A: Slimlake	  Not limited 	       	  Very limited   Depth to   saturated zone	      0.99	  Not limited 	
3629B: Perida	    Not limited   	       	    Somewhat limited   Depth to   saturated zone	      0.82	  Not limited   	

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements	Dwellings with basements		1
					<u> </u>	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u></u>	limiting features	<u> </u>	limiting features	1
M-W:					 	
Miscellaneous water	Not rated		Not rated		Not rated	
W:			 		 	
Water	Not rated	j	Not rated	į	Not rated	į

## Table 18b.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Local roads an	d	   Shallow excavati 	ons	   Lawns and landsca   	ping
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
3A:	 		 		 	
Totagatic	Very limited	i	  Very limited	i	Very limited	i
	Depth to	1.00	Depth to	1.00	Flooding	1.00
	saturated zone		saturated zone		Depth to	1.00
	Subsidence	1.00	Cutbanks cave	1.00	saturated zone	
	Flooding	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	0.80		
	Frost action	0.50	 		 	
Bowstring	  Very limited		  Very limited		  Very limited	
	Depth to	1.00	Depth to	1.00	Flooding	1.00
	saturated zone	İ	saturated zone	İ	Content of	1.00
	Subsidence	1.00	Cutbanks cave	1.00	organic matter	
	Frost action	1.00	Ponding	1.00	Depth to	1.00
	Flooding	1.00	Content of	1.00	saturated zone	
	Ponding	1.00	organic matter		Ponding	1.00
			Flooding	0.80		
Ausable	  Very limited		  Very limited		  Very limited	
	Depth to	1.00	Depth to	1.00	Flooding	1.00
	saturated zone		saturated zone		Depth to	1.00
	Subsidence	1.00	Cutbanks cave	1.00	saturated zone	
	Flooding	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	0.80		
	Frost action	0.50	 		 	
22A:	 		 		 	
Comstock	Very limited	İ	Very limited	İ	Very limited	Ì
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Frost action	1.00	Cutbanks cave	1.00		
	Low strength	1.00				
	Shrink-swell	0.50	 		 	
24A:	 		 		 	
Poskin	Very limited	į	Very limited	į	Very limited	İ
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Frost action	1.00	Cutbanks cave	1.00		
	Low strength	1.00				
27A:	 		 		 	
Scott Lake	Somewhat limited	İ	  Very limited	İ	Somewhat limited	İ
	Frost action	0.50	Cutbanks cave	1.00	Droughty	0.01
			Depth to	0.99		
			saturated zone			
28B:	 		 		 	
Haugen, very stony	Somewhat limited	i	  Very limited	i	Somewhat limited	i
	Frost action	0.50	Depth to	1.00	Depth to	0.19
	Depth to	0.19		į	saturated zone	i
	saturated zone	I	Cutbanks cave	1.00	Content of large	0 03
	Dataracea rone		Cucbanks cave	1	concent of farge	10.03

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and   streets		   Shallow excavati   	ons	Lawns and landscaping   	
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
28B: Haugen	  Somewhat limited   Frost action   Depth to   saturated zone	    0.50  0.19 	  Very limited   Depth to   saturated zone   Cutbanks cave	    1.00    1.00	  Somewhat limited   Depth to   saturated zone   Content of large   stones	0.19
Rosholt, very stony	  Somewhat limited   Frost action   	    0.50   	  Very limited   Cutbanks cave 	    1.00   		  0.02  0.01
Rosholt	  Somewhat limited   Frost action 	    0.50 	  Very limited   Cutbanks cave 	    1.00	  Somewhat limited   Droughty 	0.01
28C:		ļ		ļ		ļ
Haugen, very stony	Somewhat limited   Frost action   Depth to   saturated zone   Slope	  0.50  0.19    0.04	saturated zone Cutbanks cave	  1.00    1.00  0.04	Somewhat limited   Depth to   saturated zone   Slope   Content of large   stones	  0.19    0.04  0.03
Haugen	Somewhat limited   Frost action   Depth to   saturated zone   Slope	  0.50  0.19    0.04	Very limited   Depth to   saturated zone   Cutbanks cave   Slope	  1.00    1.00  0.04	Somewhat limited   Depth to   saturated zone   Slope   Content of large   stones	0.19
Rosholt, very stony	  Somewhat limited   Frost action   Slope 	  0.50  0.04 	  Very limited   Cutbanks cave   Slope 	  1.00  0.04 	   Somewhat limited   Slope   Droughty   Content of large   stones	  0.04  0.02  0.01
Rosholt	  Somewhat limited   Frost action   Slope 	  0.50  0.04	  Very limited   Cutbanks cave   Slope 	  1.00  0.04	  Somewhat limited   Slope   Droughty 	0.04
33B: Chetek	  Not limited   	       	  Very limited   Cutbanks cave 	    1.00   	  Somewhat limited   Droughty   Content of large   stones	  0.61  0.01
33C: Chetek	  Somewhat limited   Slope   	    0.04     	  Very limited   Cutbanks cave   Slope 	    1.00  0.04 		  0.61  0.04  0.01
38A: Rosholt	  Somewhat limited   Frost action	      0.50	  Very limited   Cutbanks cave	      1.00	  Somewhat limited   Droughty 	0.01
38B: Rosholt	  Somewhat limited   Frost action 	    0.50 	  Very limited   Cutbanks cave 	    1.00 	  Somewhat limited   Droughty 	    0.01 

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an	ıd	   Shallow excavati   	ons	   Lawns and landsca   	ping
	Rating class and limiting features	1	Rating class and   limiting features		Rating class and   limiting features	Value
38C: Rosholt	  Somewhat limited   Frost action   Slope	    0.50  0.04	!	      1.00  0.04		    0.04  0.01
38D: Rosholt	  Very limited   Slope   Frost action	1.00	  Very limited   Cutbanks cave   Slope	1	  Very limited   Slope   Droughty	    1.00  0.01
42D: Amery	  Very limited   Slope   Frost action	  1.00  0.50	!	  1.00  1.00	: -	1.00
43B: Antigo	•		: -	    1.00	  Not limited 	
43C: Antigo	  Somewhat limited   Frost action   Slope	0.50	1	      1.00  0.37	: -	0.37
43D: Antigo	  Very limited   Slope   Frost action	1.00	Slope	    1.00  1.00	:	1.00
48A: Brill	  Very limited   Frost action   Low strength   Depth to   saturated zone	1.00	!	1	  Somewhat limited   Depth to   saturated zone	    0.75   
63A: Crystal Lake	  Very limited   Frost action   Low strength   Shrink-swell   Depth to   saturated zone	    1.00  1.00  0.50  0.19	: -	1	  Somewhat limited   Depth to   saturated zone 	    0.19     
63B: Crystal Lake	  Very limited   Frost action   Low strength   Shrink-swell   Depth to   saturated zone	  1.00  1.00  0.50  0.19	  Very limited   Depth to   saturated zone   Cutbanks cave	    1.00    1.00 	  Somewhat limited   Depth to   saturated zone   	    0.19     
63C: Crystal Lake	Very limited   Frost action   Low strength   Shrink-swell   Depth to   saturated zone   Slope	  1.00  1.00  0.50  0.19 	  Very limited   Depth to   saturated zone   Cutbanks cave   Slope	  1.00    1.00  0.04	saturated zone	  0.19    0.04

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and   streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
63E: Crystal Lake	  Very limited   Slope   Frost action   Low strength	    1.00  1.00	Cutbanks cave	      1.00  1.00  0.99	  Very limited   Slope 	      1.00
64A:	Shrink-swell	0.50	saturated zone		 	
64A: Totagatic		  1.00    1.00  1.00  1.00  0.50	saturated zone Cutbanks cave Ponding	  1.00    1.00  1.00  0.80	Depth to saturated zone	  1.00  1.00    1.00
Winterfield	Very limited   Depth to   saturated zone   Flooding	  1.00    1.00	Very limited    Depth to   saturated zone   Cutbanks cave   Flooding	  1.00    1.00  0.80	Depth to	  1.00  1.00    0.50
69B: Keweenaw	  Not limited   		  Very limited   Cutbanks cave 	    1.00 	  Somewhat limited   Droughty   Content of large   stones	  0.06  0.01
Sayner	  Not limited     	       	  Very limited   Cutbanks cave   	    1.00   	  Somewhat limited   Droughty   Content of large   stones	  0.94  0.05
Vilas	  Not limited   		  Very limited   Cutbanks cave 	1.00	  Somewhat limited   Droughty 	0.42
69C: Keweenaw	  Somewhat limited   Slope   	  0.16   	  Very limited   Cutbanks cave   Slope 	  1.00  0.16 	-	  0.16  0.06  0.01
Sayner	  Somewhat limited   Slope 	  0.16   	  Very limited   Cutbanks cave   Slope 	  1.00  0.16 		  0.94  0.16  0.05
Vilas	  Somewhat limited   Slope   	  0.16 	  Very limited   Cutbanks cave   Slope 	  1.00  0.16	  Somewhat limited   Droughty   Slope 	  0.42  0.16
69E: Keweenaw	  Very limited   Slope   	  1.00     	  Very limited   Slope   Cutbanks cave	  1.00  1.00 	  Very limited   Slope   Droughty   Content of large   stones	  1.00  0.06  0.01

Table 18b.--Building Site Development--Continued

Map symbol and soil name	   Local roads an   streets 	d	   Shallow excavati   	ons	Lawns and landscaping		
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value	
69E: Sayner	  Very limited   Slope   	    1.00   	  Very limited   Slope   Cutbanks cave 	    1.00  1.00	  Very limited   Slope   Droughty   Content of large   stones	  1.00  0.94  0.05	
Vilas	  Very limited   Slope   	    1.00 	  Very limited   Slope   Cutbanks cave 	  1.00  1.00	  Very limited   Slope   Droughty 	  1.00  0.42	
74B: Vilas	  Not limited   	     	  Very limited   Cutbanks cave	1.00	  Somewhat limited   Droughty 	    0.42	
74C: Vilas	  Somewhat limited   Slope 	    0.37 	  Very limited   Cutbanks cave   Slope	    1.00  0.37	  Somewhat limited   Droughty   Slope	    0.42  0.37	
74D: Vilas	  Very limited   Slope 	    1.00	  Very limited   Slope   Cutbanks cave	    1.00  1.00	  Very limited   Slope   Droughty	    1.00  0.42	
100B: Menahga	  Not limited   	       	  Very limited   Cutbanks cave	      1.00	  Somewhat limited   Droughty   Too sandy	0.93	
100C: Menahga	  Somewhat limited   Slope 	      0.04	  Very limited   Cutbanks cave   Slope	    1.00  0.04	  Somewhat limited   Droughty   Slope	      0.51  0.04	
100D: Menahga	  Very limited   Slope 	      1.00	  Very limited   Cutbanks cave   Slope	    1.00  1.00	  Very limited   Slope   Droughty	    1.00  0.51	
127D: Amery	  Very limited   Slope   Frost action	    1.00  0.50	  Very limited   Cutbanks cave   Slope	  1.00  1.00	  Very limited   Slope   Content of large   stones	    1.00  0.03	
Rosholt	  Very limited   Slope   Frost action 	  1.00  0.50 	•	  1.00  1.00 	Very limited   Slope   Droughty   Content of large   stones	  1.00  0.02  0.01	
127E: Amery	    Very limited   Slope   Frost action	      1.00  0.50	  Very limited   Slope   Cutbanks cave	      1.00  1.00	  Very limited   Slope   Content of large   stones	      1.00  0.03	

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and   streets		   Shallow excavati   	ons	Lawns and landscaping		
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value	
127E: Rosholt	  Very limited   Slope   Frost action 	    1.00  0.50	  Very limited   Slope   Cutbanks cave 	    1.00  1.00	  Very limited   Slope   Droughty   Content of large   stones	    1.00  0.02  0.01	
156B: Magnor, very stony	Very limited Depth to saturated zone Frost action	    1.00    0.50	  Very limited   Depth to   saturated zone   Dense layer   Cutbanks cave	    1.00    0.50  0.10	  Very limited   Depth to   saturated zone   Content of large   stones	    1.00    0.01	
Magnor	   Very limited   Depth to   saturated zone   Frost action	  1.00    0.50	   Very limited   Depth to   saturated zone   Dense layer   Cutbanks cave	  1.00    0.50  0.10	  Very limited   Depth to   saturated zone	1.00	
157B: Freeon, very stony	  Very limited   Depth to   saturated zone   Frost action	    1.00    0.50	  Very limited   Depth to   saturated zone   Dense layer   Cutbanks cave	    1.00    0.50  0.10	  Very limited   Depth to   saturated zone 	    1.00   	
Freeon		  1.00    0.50	Very limited   Depth to   saturated zone   Dense layer   Cutbanks cave	  1.00    0.50  0.10		  1.00    0.01	
157C: Freeon, very stony	  Very limited   Depth to   saturated zone   Frost action   Slope	    1.00    0.50  0.04	   Very limited   Depth to   saturated zone   Dense layer   Cutbanks cave   Slope	    1.00    0.50  0.10  0.04	  Very limited   Depth to   saturated zone   Slope 	    1.00    0.04	
Freeon	Very limited   Depth to   saturated zone   Frost action   Slope	  1.00    0.50  0.04	saturated zone Dense layer	  1.00    0.50  0.10  0.04	saturated zone   Slope   Content of large	  1.00    0.04  0.01	
160A: Oesterle	  Very limited   Depth to   saturated zone   Frost action	    1.00    0.50	   Very limited   Depth to   saturated zone   Cutbanks cave	    1.00    1.00	  Very limited   Depth to   saturated zone 	1.00	
182B: Padus	  Somewhat limited   Frost action	    0.50	  Very limited   Cutbanks cave	    1.00	  Not limited   		

Table 18b.--Building Site Development--Continued

Map symbol and soil name	   Local roads an   streets 	d	   Shallow excavati   	ons	   Lawns and landsca   	ping
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
182C: Padus	  Somewhat limited   Frost action   Slope	      0.50  0.37	    Very limited   Cutbanks cave   Slope	    1.00  0.37	    Somewhat limited   Slope	
192A: Worcester	  Very limited   Depth to   saturated zone   Frost action	      1.00    0.50	  Very limited   Depth to   saturated zone   Cutbanks cave	    1.00    1.00	  Very limited   Depth to   saturated zone	      1.00   
193A: Minocqua	  Very limited   Depth to   saturated zone   Frost action   Ponding	  1.00    1.00  1.00	   Very limited   Depth to   saturated zone   Cutbanks cave   Ponding	  1.00    1.00  1.00	   Very limited   Depth to   saturated zone   Ponding	  1.00    1.00
215B: Pence	  Not limited   	         	  Very limited   Cutbanks cave 	    1.00   		0.30
215C: Pence	  Somewhat limited   Slope   	    0.37     	  Very limited   Cutbanks cave   Slope 	  1.00  0.37 		  0.37  0.30  0.01
215D: Pence	  Very limited   Slope   	    1.00   	  Very limited   Slope   Cutbanks cave 	  1.00  1.00 	   Very limited   Slope   Droughty   Content of large   stones	  1.00  0.30  0.01
315A: Rib	  Very limited   Depth to   saturated zone   Frost action   Low strength   Ponding   Shrink-swell	   1.00   1.00   1.00   1.00   0.50	  Very limited   Depth to   saturated zone   Cutbanks cave   Ponding	    1.00    1.00  1.00	   Very limited   Depth to   saturated zone   Ponding	    1.00    1.00   
337A: Plover	  Very limited   Depth to   saturated zone   Frost action	    1.00    0.50	  Very limited   Depth to   saturated zone   Cutbanks cave	    1.00    1.00	  Very limited   Depth to   saturated zone	    1.00   
368B: Mahtomedi	  Not limited 	     	  Very limited   Cutbanks cave	    1.00	  Very limited   Droughty	1.00
Cress	  Not limited   	     	  Very limited   Cutbanks cave 	    1.00	  Somewhat limited   Droughty 	0.13

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and   streets		   Shallow excavations   		   Lawns and landscaping   	
	Rating class and limiting features	Value	Rating class and limiting features	'	Rating class and limiting features	Value
368C: Mahtomedi	    Somewhat limited   Slope	'	  Very limited   Cutbanks cave   Slope	'	    Very limited   Droughty   Slope	    1.00  0.04
Cress	  Somewhat limited   Slope 	1	  Very limited   Cutbanks cave   Slope	    1.00  0.04		0.13
368D: Mahtomedi	  Very limited   Slope 	'	  Very limited   Cutbanks cave   Slope	    1.00  1.00	:	1.00
Cress	  Very limited   Slope 	    1.00 	  Very limited   Cutbanks cave   Slope	    1.00  1.00	:	  1.00  0.13
371A: Croswell	  Somewhat limited   Depth to   saturated zone	    0.19   	   Very limited   Depth to   saturated zone   Cutbanks cave	1	Somewhat limited   Droughty   Depth to   saturated zone	  0.54  0.19
380B: Cress	  Not limited	     	  Very limited   Cutbanks cave	:	  Somewhat limited   Droughty	0.13
Rosholt	  Somewhat limited   Frost action	    0.50	  Very limited   Cutbanks cave	1.00	  Somewhat limited   Droughty	0.01
380C: Cress	  Somewhat limited   Slope 	      0.04	  Very limited   Cutbanks cave   Slope	    1.00  0.04		  0.13  0.04
Rosholt	  Somewhat limited   Frost action   Slope 	:	  Very limited   Cutbanks cave   Slope	1.00	  Somewhat limited   Slope   Droughty 	  0.04  0.01
380D: Cress			  Very limited   Cutbanks cave   Slope		  Very limited   Slope   Droughty	  1.00  0.13
Rosholt	  Very limited   Slope   Frost action	  1.00  0.50	  Very limited   Cutbanks cave   Slope	  1.00  1.00	:	  1.00  0.01
383B: Mahtomedi	  Not limited 	     	  Very limited   Cutbanks cave	    1.00	  Very limited   Droughty	1.00
383C: Mahtomedi	  Somewhat limited   Slope   	    0.04 	   Very limited   Cutbanks cave   Slope	    1.00  0.04		  1.00  0.04

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an streets	d	Shallow excavati	ons	Lawns and landsca	ping
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
383D: Mahtomedi	  Very limited   Slope 	      1.00	!	      1.00  1.00	  Very limited   Slope   Droughty	    1.00  1.00
396B: Friendship	  Not limited  - 	       	!	      1.00  0.35		    0.91  0.50
Wurtsmith	  Somewhat limited   Depth to   saturated zone 	    0.19   	  Very limited   Depth to   saturated zone   Cutbanks cave	  1.00    1.00	  Somewhat limited   Droughty   Too sandy   Depth to   saturated zone	  0.87  0.50  0.19
Grayling	  Not limited   	     	  Very limited   Cutbanks cave 	    1.00 	  Very limited   Droughty   Too sandy	  1.00  0.50
397A: Perchlake	  Very limited   Depth to   saturated zone	      1.00   	saturated zone	    1.00    1.00	saturated zone	  1.00    0.36
399B: Grayling	  Not limited 	     	  Very limited   Cutbanks cave	    1.00	  Very limited   Droughty   Too sandy	1.00
399C: Grayling	  Somewhat limited   Slope   	      0.04   	l .	    1.00  0.04		  1.00  0.50  0.04
399D: Grayling	  Very limited   Slope 	    1.00 	  Very limited   Cutbanks cave   Slope	    1.00  1.00	  Very limited   Droughty   Slope   Too sandy	  1.00  1.00  0.50
405A: Lupton	  Very limited   Depth to   saturated zone   Subsidence   Frost action   Ponding	    1.00    1.00  1.00	saturated zone Content of organic matter Ponding	    1.00    1.00    1.00	  Very limited   Content of   organic matter   Depth to   saturated zone   Ponding	  1.00    1.00    1.00
Cathro	   Very limited   Depth to   saturated zone   Subsidence   Frost action   Ponding	  1.00    1.00  1.00	saturated zone Ponding Content of	  1.00    1.00  1.00    0.10	   Very limited   Content of   organic matter   Depth to   saturated zone   Ponding	  1.00    1.00 

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an	d	Shallow excavati	ons	Lawns and landsca	aping
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
405A: Tawas	    Very limited   Depth to	      1.00	    Very limited   Depth to	      1.00	    Very limited   Content of	1.00
	saturated zone Subsidence	1.00	saturated zone Cutbanks cave	1.00	organic matter Depth to	1.00
	Frost action   Ponding 	1.00  1.00 	Ponding   Content of   organic matter	1.00  1.00 	saturated zone Ponding	1.00
406A: Loxley	    Very limited		    Very limited		    Very limited	
Lowicy	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Content of   organic matter	1.00
	Subsidence Frost action	1.00	Content of organic matter	1.00	Depth to saturated zone	1.00
	Ponding   	1.00   	Ponding   Cutbanks cave 	1.00  0.10 	Ponding   	1.00   
407A: Seelyeville	    Very limited	j I	    Very limited	į į	    Very limited	İ
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Subsidence   Frost action	1.00	Content of   organic matter	1.00	Depth to saturated zone	1.00
	Ponding   	1.00   	Ponding   Cutbanks cave 	1.00  0.10	Ponding   	1.00
Markey	  Very limited   Depth to   saturated zone	  1.00 	  Very limited   Depth to   saturated zone	1.00	  Very limited   Content of   organic matter	1.00
	Frost action   Ponding 	1.00  1.00 	Cutbanks cave Ponding Content of	1.00  1.00  1.00	Depth to   saturated zone   Ponding	1.00    1.00
410A:	 	   	organic matter		 	
Seelyeville	  Very limited   Depth to   saturated zone	1.00	  Very limited   Depth to   saturated zone	1.00	  Very limited   Content of   organic matter	1.00
	Subsidence   Frost action	1.00	Content of   organic matter	1.00	Depth to saturated zone	1.00
	Ponding 	1.00	Ponding Cutbanks cave	1.00	Ponding 	1.00
Cathro	  Very limited   Depth to	1.00	  Very limited   Depth to	1.00	  Very limited   Content of	1.00
	saturated zone Subsidence	1.00	saturated zone Ponding	1.00	organic matter Depth to	1.00
	Frost action   Ponding 	1.00  1.00 	Content of organic matter Cutbanks cave	1.00    0.10	saturated zone Ponding	1.00
412A:	 		 		 	ļ
Rifle	Very limited   Depth to   saturated zone	1.00	Very limited   Depth to   saturated zone	1.00	Very limited   Depth to   saturated zone	1.00
	saturated zone   Frost action   Ponding	  1.00  1.00	Saturated zone   Content of   organic matter	1.00	Ponding	1.00
	 		Ponding Cutbanks cave	1.00	 	

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an streets	d	Shallow excavati   	ons	Lawns and landsca	aping
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u>                                     </u>	limiting features	<u> </u>	limiting features	1
412A:						
Tacoosh	Very limited		Very limited		Very limited	
	Depth to	1.00		1.00		1.00
	saturated zone Subsidence		saturated zone		saturated zone	
	Subsidence   Frost action	1.00	Ponding   Content of	1.00	Ponding	1.00
	Ponding	1.00	organic matter	1	 	i
			Cutbanks cave	0.10		į
415A:	 		 		 	
Greenwood	  Very limited	i	  Very limited	į	Very limited	i
	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone		saturated zone		organic matter	
	Subsidence	1.00	Content of	1.00	Depth to	1.00
	Frost action   Ponding	1.00	organic matter Ponding	1.00	saturated zone Ponding	1.00
			Cutbanks cave	0.10	ronaing	
439B:	 		 		 	
Graycalm	Not limited	i	  Very limited	i	Somewhat limited	i
		į	Cutbanks cave	1.00	Droughty	0.29
Menahga	  Not limited		  Very limited		  Somewhat limited	
-	į	į	Cutbanks cave	1.00	Droughty	0.49
439C:	 		 		 	
Graycalm	Somewhat limited	į	Very limited	į	Somewhat limited	j
	Slope	0.04	Cutbanks cave	1.00	Droughty	0.29
	 		Slope	0.04	Slope	0.04
Menahga	Somewhat limited		  Very limited		Somewhat limited	
	Slope	0.04	Cutbanks cave	1.00	Droughty	0.49
	 		Slope	0.04	Slope	0.04
439D:		İ				
Graycalm	: -		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope Droughty	1.00
			blope		Droughey	
Menahga	Very limited	[	Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
	 		Slope 	1.00	Droughty 	0.49
441C:		į				į
Freeon	: -	1	Very limited	1	Very limited	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	0.50	•	0.50	Slope	0.37
	Slope	0.37	:	0.37	<u> </u>	i
		į	Cutbanks cave	0.10		į
Cathro	  Very limited		  Very limited		  Not rated	
	Depth to	1.00		1.00	!	
	saturated zone		saturated zone			1
	Subsidence   Frost action	1.00		1.00	 	1
	Ponding	1.00		1	1 	1
		,	maccol	0.10	I .	1

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and   streets		   Shallow excavati   	ons	Lawns and landsca	Lawns and landscaping   	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value	
442C: Haugen	    Somewhat limited	   	    Very limited	   	    Somewhat limited	   	
	Frost action   Depth to   saturated zone	0.50  0.19 	Depth to   saturated zone   Cutbanks cave	1.00    1.00 	Depth to saturated zone Content of large stones	0.19    0.03	
Greenwood	  Very limited   Depth to   saturated zone   Frost action	  1.00    1.00	Very limited Depth to saturated zone Content of	    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	
	Ponding     	1.00   	organic matter Ponding Cutbanks cave	  1.00  0.10	 	     	
443D: Amery	  Very limited   Slope   Frost action	    1.00  0.50	  Very limited   Slope   Cutbanks cave	    1.00  1.00	  Very limited   Slope   Content of large   stones	  1.00  0.03	
Greenwood	Very limited   Depth to   saturated zone   Frost action   Ponding	  1.00    1.00  1.00	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding   Cutbanks cave	  1.00    1.00    1.00  0.10	  Very limited   Depth to   saturated zone   Ponding 	  1.00    1.00   	
461A: Bowstring	  Very limited   Depth to   saturated zone   Subsidence   Frost action   Flooding   Ponding	   1.00   1.00   1.00   1.00   1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Content of organic matter Flooding	  1.00    1.00  1.00  1.00    0.80	Content of	  1.00  1.00    1.00    1.00	
484A: Greenwood	  Very limited   Depth to   saturated zone   Frost action   Ponding	    1.00    1.00  1.00	  Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	    1.00    1.00	saturated zone	    1.00    1.00	
Beseman	  Very limited   Depth to   saturated zone   Frost action   Subsidence   Ponding	    1.00    1.00  1.00	saturated zone Ponding Content of	0.10    1.00  1.00  1.00  1.00	Very limited Content of organic matter Depth to saturated zone Ponding	    1.00    1.00 	

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and		   Shallow excavati   	ons	Lawns and landscaping	
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
495B: Karlsborg	  Somewhat limited   Depth to   saturated zone	      0.75	    Very limited   Depth to   saturated zone	      1.00	  Somewhat limited   Depth to   saturated zone	      0.75
	Frost action	0.50	•	1.00	Droughty	0.26
Grettum	  Not limited   		   Very limited   Cutbanks cave   Depth to   saturated zone	  1.00  0.35	Somewhat limited   Droughty 	0.61
Perida	  Somewhat limited   Frost action   	  0.50   	   Very limited   Cutbanks cave   Too clayey   Depth to   saturated zone	  1.00  1.00  0.82	  Somewhat limited   Droughty     	  0.44     
495C:		İ		i		i
Karlsborg	Somewhat limited   Depth to   saturated zone	0.75	  Very limited   Depth to   saturated zone	1.00	Somewhat limited   Depth to   saturated zone	0.75
	Frost action   Slope 	0.50  0.04 	Too clayey   Cutbanks cave   Slope	1.00  1.00  0.04	Droughty   Slope 	0.26  0.04 
Grettum	Somewhat limited   Slope     	0.04	Very limited Cutbanks cave Depth to saturated zone Slope	  1.00  0.35    0.04	Somewhat limited   Droughty   Slope	  0.61  0.04 
Perida	  Somewhat limited   Frost action   Slope   	  0.50  0.04 	!	  1.00  1.00  0.82    0.04	:	  0.44  0.04 
	!		[	ļ	!	
495D: Karlsborg	  Very limited   Slope   Depth to	  1.00  0.75	  Very limited   Depth to   saturated zone	  1.00	  Very limited   Slope   Depth to	  1.00  0.75
	saturated zone   Frost action	0.50	Too clayey Cutbanks cave	1.00  1.00  1.00	saturated zone   Droughty	0.26
Grettum	  Very limited   Slope   	  1.00   	  Very limited   Cutbanks cave   Slope   Depth to   saturated zone	  1.00  1.00  0.35	:	  1.00  0.61 
Perida	  Very limited   Slope   Frost action   	  1.00  0.50   	!	  1.00  1.00  1.00  0.82	  Very limited   Slope   Droughty   	  1.00  0.44 

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an streets	d	   Shallow excavati   	ons	Lawns and landscaping   	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
497A: Meenon	Very limited Depth to saturated zone Frost action	    1.00    0.50	   Very limited   Depth to   saturated zone   Too clayey   Cutbanks cave	    1.00    1.00  1.00	Very limited Depth to saturated zone Droughty	    1.00    0.41
515A: Manitowish	  Not limited   	       	  Very limited   Cutbanks cave   Depth to   saturated zone	    1.00  0.99 	  Somewhat limited   Droughty   Content of large   stones	  0.17  0.01
521A:	 				 	
Dody	Very limited   Depth to   saturated zone   Frost action   Low strength   Shrink-swell   Ponding	  1.00    1.00  1.00  1.00	Very limited   Depth to   saturated zone   Cutbanks cave   Too clayey   Ponding	  1.00    1.00  1.00  1.00	Very limited   Depth to   saturated zone   Ponding 	  1.00    1.00   
524E:						
Rock outcrop	Not rated		Not rated		Not rated	
Frogcreek	  Very limited   Depth to   saturated zone   Frost action	  1.00    0.50	  Very limited   Depth to   saturated zone   Cutbanks cave   Dense layer	  1.00    1.00  0.50	  Very limited   Depth to   saturated zone   	  1.00     
Metonga	  Very limited   Slope   Frost action   Depth to hard   bedrock	  1.00  0.50  0.42	  Very limited   Depth to hard   bedrock   Slope   Cutbanks cave	  1.00    1.00  0.10	Very limited   Slope   Depth to bedrock   Content of large   stones	
542B:	 		 		 	
Haugen, very stony	Somewhat limited   Frost action   Depth to   saturated zone	  0.50  0.19 	Very limited    Depth to   saturated zone   Cutbanks cave	  1.00    1.00	Somewhat limited   Depth to   saturated zone   Content of large   stones	  0.19    0.03
Haugen		  0.50  0.19 	   Very limited   Depth to   saturated zone   Cutbanks cave	  1.00    1.00		  0.19    0.03
542C: Haugen, very stony	  Somewhat limited   Frost action   Depth to   saturated zone   Slope	    0.50  0.19    0.04	  Very limited   Depth to   saturated zone   Cutbanks cave   Slope	    1.00    1.00  0.04	  Somewhat limited   Depth to   saturated zone   Slope   Content of large   stones	    0.19    0.04  0.03

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and   streets		   Shallow excavati   	ons	Lawns and landsca	ping
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
542C: Haugen	  Somewhat limited   Frost action   Depth to   saturated zone   Slope	    0.50  0.19    0.04	saturated zone Cutbanks cave	    1.00    1.00  0.04	  Somewhat limited   Depth to   saturated zone   Slope   Content of large	    0.19    0.04  0.03
543B: Anigon	  -  Somewhat limited   Frost action   Low strength	      0.50  0.22	    Very limited   Cutbanks cave	        1.00	stones    Not limited	
543C2: Anigon	i I	      0.50  0.22  0.04	    Very limited   Cutbanks cave   Slope	    1.00  0.04	    Somewhat limited   Slope 	      0.04
544F: Menahga	    Very limited   Slope 	      1.00	    Very limited   Slope   Cutbanks cave	      1.00  1.00	    Very limited   Slope   Droughty	    1.00  0.51
Mahtomedi	  Very limited   Slope 	    1.00 	  Very limited   Slope   Cutbanks cave	  1.00  1.00	  Very limited   Slope   Droughty	  1.00  1.00
555A: Fordum	  Very limited   Depth to   saturated zone   Frost action   Flooding   Ponding	  1.00    1.00  1.00	saturated zone Cutbanks cave Ponding	  1.00    1.00  1.00  0.80	   Very limited   Flooding   Depth to   saturated zone   Ponding	  1.00  1.00    1.00
574B: Sayner	  Not limited   		  Very limited   Cutbanks cave	    1.00 	  Somewhat limited   Droughty   Content of large   stones	0.94
574C: Sayner	  Somewhat limited   Slope   	0.37	  Very limited   Cutbanks cave   Slope 	  1.00  0.37 	Somewhat limited   Droughty   Slope   Content of large   stones	  0.94  0.37  0.01
574E: Sayner	  Very limited   Slope   	      1.00   	  Very limited   Slope   Cutbanks cave 	    1.00  1.00	  Very limited   Slope   Droughty   Content of large   stones	    1.00  0.94  0.01

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavati	ons	Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
579B: Parkfalls	Very limited Depth to saturated zone Frost action	    1.00    1.00	  Very limited   Depth to   saturated zone   Cutbanks cave   Dense layer	    1.00    1.00  0.50	saturated zone Content of large	    1.00    0.01
600A: Haplosaprists	Not rated		  Not rated	 	    Not rated	İ
Psammaquents	Not rated	   	  Not rated 	   	  Not rated 	
615B: Cress	Not limited		  Very limited   Cutbanks cave	1.00	    Somewhat limited   Droughty 	    0.13
615C: Cress	Somewhat limited Slope	    0.04 	  Very limited   Cutbanks cave   Slope	    1.00  0.04		    0.13  0.04
615D:   Cress	Very limited Slope	    1.00	  Very limited   Cutbanks cave   Slope	    1.00  1.00	  Very limited   Slope   Droughty	  1.00  0.13
623A: Capitola	Very limited  Depth to  saturated zone  Frost action  Ponding	  1.00    1.00  1.00	Very limited  Depth to saturated zone Ponding Dense layer Cutbanks cave	  1.00    1.00  0.50  0.10	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00
624A: Ossmer	Very limited  Depth to  saturated zone  Frost action	    1.00    0.50	   Very limited   Depth to   saturated zone   Cutbanks cave	    1.00    1.00	  Very limited   Depth to   saturated zone 	    1.00   
632A:   Aftad	Somewhat limited Frost action Depth to saturated zone	  0.50  0.19 	   Very limited   Depth to   saturated zone   Cutbanks cave	  1.00    1.00	  Somewhat limited   Depth to   saturated zone	  0.19   
632B: Aftad	Somewhat limited Frost action Depth to saturated zone	  0.50  0.19 	· -	  1.00    1.00	  Somewhat limited   Depth to   saturated zone	  0.19   
632C: Aftad	Somewhat limited Frost action Depth to saturated zone	  0.50  0.19    0.04	-	  1.00    1.00  0.04	  Somewhat limited   Depth to   saturated zone   Slope	  0.19    0.04

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an	đ	   Shallow excavati 	ons	Lawns and landsca	ping
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
633F: Pence	  Very limited   Slope   	    1.00     	  Very limited   Slope   Cutbanks cave	    1.00  1.00 	<u>-</u>	  1.00  0.30  0.01
Padus	  Very limited   Slope   Frost action	  1.00  0.50	-	  1.00  1.00	<u>-</u>	1.00
648B: Sconsin	  Somewhat limited   Depth to   saturated zone   Frost action	  0.75    0.50	saturated zone	  1.00    1.00  0.50	saturated zone	0.75
670C: Keweenaw	  Somewhat limited   Slope   	      0.37   	  Very limited   Cutbanks cave   Slope 	    1.00  0.37		  0.37  0.05  0.01
Pence	  Somewhat limited   Slope   	    0.37     	  Very limited   Cutbanks cave   Slope 	  1.00  0.37 		  0.37  0.30  0.05
670E: Keweenaw	  Very limited   Slope   	    1.00   	  Very limited   Slope   Cutbanks cave 	    1.00  1.00 	<u>-</u>	  1.00  0.05  0.01
Pence	  Very limited   Slope   	  1.00     	   Very limited   Slope   Cutbanks cave 	  1.00  1.00 		  1.00  0.30  0.05
671B: Spoonerhill, stony	  Somewhat limited   Depth to   saturated zone 	    0.19     	   Very limited   Depth to   saturated zone   Cutbanks cave   Dense layer	  1.00    1.00  0.50	Depth to saturated zone	  0.42  0.19    0.05
Spoonerhill	  Somewhat limited   Depth to   saturated zone   	    0.19     	   Very limited   Depth to   saturated zone   Cutbanks cave   Dense layer	  1.00    1.00  0.50	Depth to saturated zone	  0.42  0.19    0.01

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and     streets		Shallow excavati   	ons	Lawns and landscaping	
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
680B: Stanberry, stony	  Somewhat limited   Frost action   Depth to   saturated zone	    0.50  0.19 	  Very limited   Depth to   saturated zone   Cutbanks cave   Dense layer	    1.00    1.00  0.50	  Somewhat limited   Depth to   saturated zone   Content of large   stones	    0.19    0.01
Pence, stony	  Not limited     	       	  Very limited   Cutbanks cave   	    1.00   	  Somewhat limited   Droughty   Content of large   stones	  0.30  0.01 
683A: Tipler	  Somewhat limited   Frost action 	    0.50   	  Very limited   Cutbanks cave   Depth to   saturated zone	    1.00  0.99 	  Not limited     	
706A: Winterfield	  Very limited   Depth to   saturated zone   Flooding	  1.00    1.00	   Very limited   Depth to   saturated zone   Cutbanks cave   Flooding	  1.00    1.00  0.80	  Very limited   Flooding   Depth to   saturated zone   Droughty	  1.00  1.00      0.10
Totagatic	   Very limited   Depth to   saturated zone   Flooding   Ponding   Frost action	  1.00    1.00  1.00  0.50	   Very limited   Depth to   saturated zone   Cutbanks cave   Ponding   Flooding	  1.00    1.00  1.00  0.80	   Very limited   Flooding   Depth to   saturated zone   Ponding   Droughty	  1.00  1.00    1.00  0.37
724A: Rib	   Very limited   Depth to   saturated zone   Frost action   Low strength   Ponding   Shrink-swell	    1.00  1.00  1.00  1.00	  Very limited   Depth to   saturated zone   Cutbanks cave   Ponding	    1.00    1.00  1.00	  Very limited   Depth to   saturated zone   Ponding 	    1.00    1.00
Rock outcrop	  Not rated 	   	  Not rated 	   	  Not rated 	
726B: Sissabagama	  Not limited     	       	  Very limited   Cutbanks cave   Depth to   saturated zone	    1.00  0.99 	  Somewhat limited   Droughty   	  0.42   
733A: Wozny	  Very limited   Depth to   saturated zone   Frost action   Ponding	    1.00    1.00  1.00	  Very limited   Depth to   saturated zone   Cutbanks cave   Ponding   Dense layer	  1.00    1.00  1.00  0.50	  Very limited   Depth to   saturated zone   Ponding 	  1.00    1.00   

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and		Shallow excavati   	Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value	
771A: Lenroot	  Somewhat limited   Depth to   saturated zone	      0.19   	  Very limited   Depth to   saturated zone   Cutbanks cave	      1.00    1.00	Depth to	      0.99  0.19	
827A: Scoba	  Somewhat limited   Frost action   Depth to   saturated zone	    0.50  0.19 	: -	    1.00    1.00	  Somewhat limited   Depth to   saturated zone	      0.19   	
853C: Frogcreek	  Very limited   Depth to   saturated zone   Frost action	  1.00    0.50	saturated zone	  1.00    1.00  0.50	saturated zone	    1.00   	
Stinnett	  Very limited   Depth to   saturated zone   Frost action	  1.00    0.50	   Very limited   Depth to   saturated zone   Cutbanks cave   Dense layer	  1.00    1.00  0.50	saturated zone	    1.00     	
Wozny	   Very limited   Depth to   saturated zone   Frost action   Ponding	  1.00    1.00  1.00	saturated zone Cutbanks cave	  1.00    1.00  1.00  0.50	saturated zone Ponding	  1.00    1.00 	
856B: Stinnett	  Very limited   Depth to   saturated zone   Frost action	  1.00    0.50	  Very limited   Depth to   saturated zone   Cutbanks cave   Dense layer	  1.00    1.00  0.50	saturated zone	    1.00     	
857B: Frogcreek	  Very limited   Depth to   saturated zone   Frost action	  1.00    0.50	saturated zone	  1.00    1.00  0.50	  Very limited   Depth to   saturated zone	    1.00     	
857C: Frogcreek	  Very limited   Depth to   saturated zone   Frost action   Slope	  1.00    0.50  0.16	saturated zone Cutbanks cave	  1.00    1.00  0.50  0.16	  Very limited   Depth to   saturated zone   Slope	  1.00    0.16 	
873B: Stanberry	  Somewhat limited   Frost action   Depth to   saturated zone	  0.50  0.19 	   Very limited   Depth to   saturated zone   Cutbanks cave   Dense layer	  1.00    1.00  0.50		  0.19    0.01 	

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and		   Shallow excavati   	ons	   Lawns and landsca   	aping
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features		limiting features	<u> </u>
873C:	Ī		l I		 	
Stanberry	  Somewhat limited		  Very limited		  Somewhat limited	i
	Frost action	0.50	Depth to	1.00	Slope	0.37
	Slope	0.37	saturated zone	İ	Depth to	0.19
	Depth to	0.19	Cutbanks cave	1.00	!	
	saturated zone		Dense layer	0.50	:	0.01
			Slope	0.37	stones	1
873D:				İ		i
Stanberry	Very limited	į	Very limited	İ	Very limited	į
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	0.50	Depth to	1.00		0.19
	Depth to saturated zone	0.19	saturated zone Cutbanks cave	1.00	saturated zone Content of large	
	saturated zone		Dense layer	0.50	stones	10.01
						i
905A:	İ	į	İ	İ	İ	į
Cublake	Not limited		Very limited	1	Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.61
	 		Depth to saturated zone	0.99	 	
	 		Bacuraced Zone		 	i
926A:	İ	i		İ	İ	i
Flink	Very limited	İ	Very limited	İ	Very limited	İ
	Depth to	1.00	· -	1.00		1.00
	saturated zone		saturated zone		saturated zone	
	Frost action	0.50	Cutbanks cave	1.00	Droughty 	0.64
943D:		i		į		i
Stanberry	Very limited		Very limited		Very limited	
	Slope	1.00	: -	1.00	Slope	1.00
	Frost action   Depth to	0.50	saturated zone Cutbanks cave	1.00	Depth to saturated zone	0.19
	saturated zone	0.19	Slope	1.00	1	0.01
		i	Dense layer	0.50	:	
Greenwood	· -	1	Very limited	'	Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Content of	1.00	!	1.00
	Ponding	1.00	organic matter	į		i
			Ponding	1.00		
			Cutbanks cave	0.10		
948A:	 		 	1	 	
Billyboy	Somewhat limited		  Very limited		  Somewhat limited	i
	Depth to	0.75		1.00	Depth to	0.75
	saturated zone		saturated zone	İ	saturated zone	
	Frost action	0.50	Cutbanks cave	1.00		
970C:	 		 	 	 	 
Keweenaw	Somewhat limited		  Very limited		  Somewhat limited	
	Slope	0.37	Cutbanks cave	1.00	Slope	0.37
	[		Slope	0.37		0.05
					Content of large	0.01
		1			stones	1

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an	d	   Shallow excavati 	ons	   Lawns and landsca 	ping
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
970C: Pence	  Somewhat limited   Slope   	0.37	  Very limited   Cutbanks cave   Slope 	    1.00  0.37 		    0.37  0.30  0.01
Greenwood	  Very limited   Depth to   saturated zone   Frost action   Ponding	  1.00    1.00  1.00	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding   Cutbanks cave	  1.00    1.00    1.00  0.10	Not rated 	
970E: Keweenaw	  Very limited   Slope 	    1.00   	  Very limited   Slope   Cutbanks cave	  1.00  1.00 		  1.00  0.05  0.01
Pence	  Very limited   Slope   	  1.00   	  Very limited   Slope   Cutbanks cave	  1.00  1.00 	-	  1.00  0.30  0.01
Greenwood	   Very limited   Depth to   saturated zone   Frost action   Ponding	  1.00    1.00  1.00	saturated zone	  1.00    1.00    1.00  0.10	Not rated	
1070C: Fremstadt	  Somewhat limited   Slope 	    0.16	  Very limited   Cutbanks cave   Slope	    1.00  0.16	: -	0.16
Cress	  Somewhat limited   Slope   	  0.04 	  Very limited   Cutbanks cave   Slope 	  1.00  0.04		0.13
1070D: Fremstadt	  Very limited   Slope 	    1.00	  Very limited   Slope   Cutbanks cave	    1.00  1.00	  Very limited   Slope   Droughty	1.00
Cress	  Very limited   Slope   	  1.00   	  Very limited   Cutbanks cave   Slope 	  1.00  1.00	· -	  1.00  0.13
1080B: Spoonerhill	  Somewhat limited   Depth to   saturated zone   	    0.19     	  Very limited   Depth to   saturated zone   Cutbanks cave   Dense layer	  1.00    1.00  0.50	'	  0.42  0.19    0.01

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
1080B: Spoonerhill, stony	  Somewhat limited   Depth to   saturated zone 	    0.19     	saturated zone Cutbanks cave	1.00	Depth to saturated zone	    0.42  0.19    0.05
Cress	  Not limited 		  Very limited   Cutbanks cave	1.00	  Somewhat limited   Droughty	0.13
1653C: Stanberry	  Somewhat limited   Frost action   Depth to   saturated zone   Slope		Cutbanks cave	1.00	saturated zone Slope Content of large	  0.19    0.04  0.01
Parkfalls	   Very limited   Depth to   saturated zone   Frost action		saturated zone Cutbanks cave	!		  1.00    0.01
Wozny	   Very limited   Depth to   saturated zone   Frost action   Ponding	1.00	saturated zone Cutbanks cave Ponding	1.00	saturated zone	  1.00    1.00 
2015: Pits	    Not rated		    Not rated		    Not rated	
2050: Landfill	    Not rated		    Not rated		    Not rated	
3011A: Barronett	  Very limited   Depth to   saturated zone   Frost action   Low strength   Ponding   Shrink-swell	  1.00    1.00  1.00  1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	    1.00    1.00  1.00	  Very limited   Depth to   saturated zone   Ponding 	  1.00    1.00 
3125A: Meehan	  Very limited   Depth to   saturated zone 	    1.00 	  Very limited   Depth to   saturated zone   Cutbanks cave	    1.00    1.00	saturated zone	    1.00    0.88
3126A: Wurtsmith	  Somewhat limited   Depth to   saturated zone 	  0.19   	   Very limited   Depth to   saturated zone   Cutbanks cave	    1.00    1.00	  Somewhat limited   Droughty   Depth to   saturated zone	  0.83  0.19

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and     streets		   Shallow excavati   	ons	Lawns and landsca	ping
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features		limiting features	
3276A: Au Gres	  Very limited   Depth to   saturated zone	      1.00	    Very limited   Depth to   saturated zone   Cutbanks cave	      1.00    1.00	  Very limited   Depth to   saturated zone   Droughty	    1.00    0.09
		i				
3312B: Glendenning, very stony	  Very limited   Depth to   saturated zone   Frost action	    1.00    0.50	  Very limited   Depth to   saturated zone   Cutbanks cave	      1.00    0.10	Very limited Depth to saturated zone Content of large stones	1.00
Glendenning	  Very limited   Depth to   saturated zone   Frost action	  1.00    0.50	  Very limited   Depth to   saturated zone   Cutbanks cave	    1.00    0.10	Very limited   Depth to   saturated zone   Content of large   stones	  1.00    0.01
3336A:			 		 	
Fenander	Very limited   Depth to   saturated zone   Frost action   Ponding	  1.00    1.00  1.00	Very limited  Depth to  saturated zone  Cutbanks cave  Ponding	  1.00    1.00  1.00	Very limited   Depth to   saturated zone   Ponding	  1.00    1.00
3403A:						
Loxley	Very limited   Depth to   saturated zone   Subsidence   Frost action   Ponding	  1.00    1.00  1.00	Very limited    Depth to   saturated zone   Content of   organic matter   Ponding   Cutbanks cave	  1.00    1.00    1.00  0.10	Very limited  Content of  organic matter  Depth to  saturated zone  Ponding	  1.00    1.00    1.00
Beseman	   Very limited   Depth to   saturated zone   Frost action   Subsidence   Ponding	  1.00    1.00  1.00		  1.00    1.00  1.00    0.10		  1.00    1.00    1.00
Dawson	Very limited   Depth to   saturated zone   Subsidence   Frost action   Ponding	  1.00    1.00  1.00  1.00	Very limited   Depth to   saturated zone   Cutbanks cave   Ponding   Content of   organic matter	  1.00    1.00  1.00  1.00	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00
3424C: Frogcreek	  Very limited   Depth to   saturated zone   Frost action	    1.00    0.50	  Very limited   Depth to   saturated zone   Cutbanks cave   Dense layer	    1.00    1.00  0.50	  Very limited   Depth to   saturated zone 	1.00

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an	d	Shallow excavations		Shallow excavations   Lawns and landscapin		ping
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value	
3424C: Magroc	Very limited Depth to saturated zone Frost action	    1.00    0.50	   Very limited   Depth to   saturated zone   Cutbanks cave   Dense layer   Depth to hard   bedrock	    1.00    1.00  0.50  0.42	Very limited Depth to saturated zone Content of large stones	    1.00    0.03	
Stinnett	   Very limited   Depth to   saturated zone   Frost action	  1.00    0.50	Very limited  Depth to saturated zone Cutbanks cave Dense layer	  1.00    1.00  0.50	  Very limited   Depth to   saturated zone 	  1.00 	
Rock outcrop	  Not rated	   	  Not rated	   	  Not rated		
3446A: Newson	  Very limited   Depth to   saturated zone   Ponding   Frost action	    1.00    1.00  0.50	  Very limited   Depth to   saturated zone   Cutbanks cave   Ponding	    1.00    1.00  1.00	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	
3448B: Grettum	  Not limited   	       	   Very limited   Cutbanks cave   Depth to   saturated zone	    1.00  0.35	  Somewhat limited   Droughty 	0.61	
3448C: Grettum	  Somewhat limited   Slope 	      0.04   	  Very limited   Cutbanks cave   Depth to   saturated zone   Slope	    1.00  0.35    0.04		0.61	
3516A: Slimlake	  Not limited   	         	  Very limited   Cutbanks cave   Depth to   saturated zone	      1.00  0.99	  Somewhat limited   Droughty   	      0.21   	
3629B: Perida	  Somewhat limited   Frost action   	    0.50     	!	  1.00  1.00  0.82	  Somewhat limited   Droughty   	0.44	
M-W: Miscellaneous water	  Not rated	   	Not rated		  Not rated		
W: Water	    Not rated 	     	    Not rated 	     	    Not rated 	     	

## Table 19a.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol	Septic tank		Sewage lagoons	
and soil name	absorption fiel	ds	I	
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
3A:			 	
Totagatic	  Vorm limited	1	  Very limited	1
iotagatie	Flooding	1.00	Flooding	1.00
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity		Ponding	1.00
	Subsidence	1.00	Content of	1.00
	Seepage	1.00	organic matter	
		į		İ
Bowstring	Very limited	İ	Very limited	İ
	Flooding	1.00	Flooding	1.00
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity		Ponding	1.00
	Subsidence	1.00	Content of	1.00
	Seepage	1.00	organic matter	
Ausable	  Very limited		  Very limited	
Hababic	Flooding	1.00	Flooding	1.00
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity		Ponding	1.00
	Subsidence	1.00	Content of	1.00
	Seepage	1.00	organic matter	İ
22A: Comstock	  Very limited		  Very limited	1
Comstock	Depth to	1.00	Depth to	1.00
	saturated zone	1	saturated zone	1
	Restricted	1.00	Seepage	0.53
	permeability		beepage 	
	į	į		İ
24A:				!
Poskin	Very limited		Very limited	
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	1
	capacity		 	1
	Seepage	1.00	 	1
	Restricted	0.46	 	1
	permeability	1	I	1

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	ds	Sewage lagoons   	
	Rating class and limiting features	Value	Rating class and limiting features	Value
27A:				
Scott Lake	Very limited    Depth to   saturated zone   Filtering   capacity   Seepage   Restricted   permeability	  1.00    1.00    1.00  0.46	Very limited   Seepage   Depth to   saturated zone	  1.00  1.00     
28B: Haugen, very stony	Very limited   Depth to   saturated zone   Restricted   permeability	  1.00    1.00	Somewhat limited   Depth to   saturated zone   Seepage   Slope	  0.75    0.53  0.32
Haugen	Very limited   Depth to   saturated zone   Restricted   permeability	  1.00    1.00	Somewhat limited   Depth to   saturated zone   Seepage   Slope	  0.75    0.53  0.32
Rosholt, very stony	  Very limited   Filtering   capacity   Seepage   Restricted   permeability	  1.00    1.00  0.46	  Very limited   Seepage   Slope 	  1.00  0.32   
Rosholt		  1.00    1.00  0.46	  Very limited   Seepage   Slope 	  1.00  0.32   
28C:			 	
Haugen, very stony	Very limited   Depth to   saturated zone   Restricted   permeability   Slope	  1.00    1.00    0.04	Very limited   Slope   Depth to   saturated zone   Seepage	  1.00  0.75    0.53
Haugen	   Very limited   Depth to   saturated zone   Restricted   permeability   Slope	  1.00    1.00    0.04	  Very limited   Slope   Depth to   saturated zone   Seepage	  1.00  0.75    0.53
Rosholt, very stony		  1.00    1.00  0.46    0.04	   Very limited   Seepage   Slope   	  1.00  1.00     

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	.ds	Sewage lagoons	
	   Rating class and   limiting features	Value	   Rating class and   limiting features	Value
	İ	İ	İ	İ
28C:				
Rosholt	Very limited	1	Very limited	
	Filtering   capacity	1.00	Seepage   Slope	1.00
	Seepage	1.00	Slope	1
	Restricted	0.46		i
	permeability	j	İ	j
	Slope	0.04	!	
33B:	 		l I	
	  Very limited		  Very limited	i
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.32
	Seepage	1.00		
33C:	 	1	 	
Chetek	  Very limited	i	  Very limited	i
	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage	1.00		
	Slope 	0.04	 	
38A:		İ		
Rosholt	Very limited		Very limited	
	Filtering	1.00	Seepage	1.00
	capacity	1 00	  -	
	Seepage   Restricted	1.00  0.46	 	l
	permeability			
38B: Rosholt	  Very limited		  Very limited	
	Filtering	1.00	Seepage	1.00
	capacity	j	Slope	0.32
	Seepage	1.00		
	Restricted	0.46		
	permeability		 	
38C:		İ		
Rosholt	Very limited		Very limited	
	Filtering	1.00	Seepage	1.00
	capacity	1 00	Slope	1.00
	Seepage   Restricted	1.00  0.46	 	
	permeability		 	i
	Slope	0.04	İ	İ
38D:			 	
Rosholt	  Very limited	l l	  Very limited	l l
	Filtering	1.00	Slope	1.00
	capacity	j	Seepage	1.00
	Seepage	1.00		
	Slope	1.00		
	Restricted permeability	0.46	 	
42D:				
Amery	Very limited   Restricted	1.00	Very limited	1.00
	Restricted   permeability	1	Slope   Seepage	0.53
	Slope	1.00		İ

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	ds	Sewage lagoons 	
	Rating class and	Value	Rating class and   limiting features	Value
43B:	 		 	
Antigo	Very limited   Filtering   capacity   Seepage   Restricted	  1.00    1.00  0.46	Very limited   Seepage   Slope	1.00
	permeability			
429				
43C: Antigo	   Very limited   Filtering   capacity   Seepage   Restricted   permeability   Slope	  1.00    1.00  0.46    0.37	  Very limited   Seepage   Slope   	  1.00  1.00     
43D:		į		į
Antigo	Very limited   Filtering   capacity   Slope   Seepage   Restricted   permeability	  1.00    1.00  1.00  0.46	Very limited   Slope   Seepage 	  1.00  1.00   
48A:	 		 	
Brill	Very limited    Depth to   saturated zone   Filtering   capacity   Seepage   Restricted   permeability	  1.00    1.00    1.00  0.46	Very limited   Seepage   Depth to   saturated zone 	  1.00  0.99       
63A:		į		į
Crystal Lake	Depth to   saturated zone   Restricted   permeability	  1.00    1.00	Very limited   Depth to   saturated zone   Seepage	  1.00    0.53
63B:				
Crystal Lake	Very limited   Depth to   saturated zone   Restricted   permeability	  1.00    1.00 	Very limited   Depth to   saturated zone   Seepage   Slope	  1.00    0.53  0.32
63C:		į		į
Crystal Lake	Very limited	  1.00    1.00    0.04	Very limited   Slope   Depth to   saturated zone   Seepage	  1.00  0.99    0.53

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	ds	   Sewage lagoons 	
	   Rating class and   limiting features	Value	Rating class and limiting features	Value
	IIMICING Teacures	1	IIMICING TEACUTES	1
63E:	! 	i	 	i
Crystal Lake	  Very limited	i	  Very limited	i
	Depth to	1.00	Slope	1.00
	saturated zone		Seepage	0.53
	Slope	1.00	Depth to	0.19
	Restricted permeability	1.00	saturated zone	
64A:	 		 	 
Totagatic	Very limited	İ	Very limited	İ
	Flooding	1.00	Flooding	1.00
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity Subsidence	1 00	Ponding	1.00
	Seepage	1.00  1.00	Content of organic matter	1.00
	beepage	1	Organic Maccer	1
Winterfield	  Very limited	i	  Very limited	i
	Flooding	1.00	Flooding	1.00
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	!
	capacity			
	Seepage	1.00		
69B:	 	i	 	1
	  Very limited	i	  Very limited	i
	Seepage	1.00	Seepage	1.00
			Slope	0.32
_				
Sayner	Very limited	1 00	Very limited	
	Filtering   capacity	1.00	Seepage   Slope	1.00
	Seepage	1.00	blobe	0.32
	2002430			i
Vilas	  Very limited	i	  Very limited	i
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.32
	Seepage	1.00		
609				-
69C:	  Vorus limited		  Vorus limited	
Keweenaw	Very limited   Seepage	1.00	Very limited   Seepage	1.00
	Slope	0.16	Slope	1.00
	<u> </u>	i	<u> </u>	i
Sayner	Very limited	j	Very limited	İ
		11 00	Seepage	1.00
	Filtering	1.00	F3-	
	capacity	į	Slope	1.00
	capacity Seepage	1.00		1.00
	capacity	į		1.00   
Vilagana	capacity Seepage Slope	1.00	Slope   	1.00     
Vilas	capacity Seepage Slope	  1.00  0.16 	Slope	     
Vilas	capacity Seepage Slope Very limited Filtering	1.00	Slope  Very limited  Seepage	        1.00
Vilas	capacity Seepage Slope Very limited Filtering capacity	  1.00  0.16      1.00	Slope	     
Vilas	capacity Seepage Slope Very limited Filtering	  1.00  0.16 	Slope  Very limited  Seepage	        1.00

Table 19a.--Sanitary Facilities--Continued

limiting features	
	alue
Keweenaw	
Keweenaw	
Slope   1.00   Slope   1.00   Seepage   1.00   Seepage   1.00   Seepage   1.00   Seepage   1.00   Seepage   1.00   Slope   1.00   Slope   1.00   Seepage   1.00   Seepage   1.00   Seepage   1.00   Seepage   1.00   Seepage   1.00   Seepage   1.00   Slope   1.00   Slope   1.00   Slope   1.00   Seepage   1.00   S	
Sayner	.00
Filtering	.00
Filtering	
capacity   Seepage   1.00       Slope   1.00       Seepage   1.00       Vilas	.00
Seepage	.00
Vilas	
Filtering   1.00   Slope   1	
Filtering   1.00   Slope   1	
Slope   1.00	.00
Seepage	.00
74B:	
Vilas	
Filtering	
capacity Slope 0	
	.00
Seepage   1.00	.08
74C:	
Vilas   Very limited   Very limited	
	.00
capacity	.00
Slope   0.37	
i i i i	
74D:	
Vilas  Very limited   Very limited     Filtering   1.00   Slope   1.00   Very limited	.00
	.00
Slope   1.00	
Seepage   1.00	
100B:	
MenahgaVery limited   Very limited	
	.00
capacity   Slope   0	.08
Seepage  1.00	
100C:	
MenahgaVery limited   Very limited	
Filtering   1.00   Seepage   1.	.00
	.00
Seepage   1.00	
100D:	
Menahga Very limited   Very limited	
3	.00
capacity   Seepage   1.00	.00
Slope   1.00	
i i i	

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons   	
	Rating class and limiting features	Value	Rating class and limiting features	Value
127D:	l I		 	
	  Very limited		  Very limited	
	Restricted	1.00	Slope	1.00
	permeability		Seepage	0.53
	Slope	1.00	 	
Rosholt	  Very limited	i	  Very limited	
	Filtering	1.00	Slope	1.00
	capacity		Seepage	1.00
	Seepage   Slope	1.00	 	
	Restricted	0.46	 	
	permeability			j
	!	1		
127E: Amery	  Very limited		  Very limited	
Amery	Slope	1.00	Slope	1.00
	Restricted	1.00	Seepage	0.53
	permeability			ļ
Rosholt	  Vorus limited		  Very limited	
KOSHOIC	Filtering	1.00	Slope	1.00
	capacity		Seepage	1.00
	Slope	1.00		ĺ
	Seepage	1.00		
	Restricted permeability	0.46	 	
		i		j
156B:				
Magnor, very stony	Very limited   Depth to	1.00	Very limited   Depth to	1.00
	saturated zone	1	saturated zone	1
	Restricted	1.00	Seepage	0.53
	permeability			
Magnor	  Very limited		  Very limited	
Magnor	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Seepage	0.53
	permeability		 	
157B:	 	i	 	l I
Freeon, very stony	  Very limited	i	  Very limited	j
	Depth to	1.00	Depth to	1.00
	saturated zone	1.00	saturated zone	0.53
	Restricted permeability	1	Seepage   Slope	0.33
		i		
Freeon	: -	1	Very limited	
	Depth to	1.00		1.00
	saturated zone Restricted	1.00	saturated zone Seepage	0.53
	permeability		Slope	0.32
				1
157C:	 		 	
Freeon, very stony	Very limited   Depth to	1.00	Very limited   Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Slope	1.00
	Restricted	11.00	Diope	1-00
	Restricted   permeability   Slope	0.04	Seepage	0.53

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	ds	Sewage lagoons   	
	Rating class and limiting features	Value	Rating class and limiting features	Value
1570.				
157C: Freeon	  Very limited   Depth to   saturated zone   Restricted   permeability   Slope	  1.00    1.00    0.04	  Very limited   Depth to   saturated zone   Slope   Seepage	  1.00    1.00  0.53
160A:			l	
Oesterle	   Very limited   Depth to   saturated zone   Filtering   capacity   Seepage	  1.00    1.00    1.00	   Very limited   Seepage   Depth to   saturated zone	  1.00  1.00 
182B:				
Padus	Very limited   Filtering   capacity   Seepage   Restricted   permeability	  1.00    1.00  0.46	Very limited   Seepage   Slope 	  1.00  0.08   
182C:			 	
Padus	Very limited   Filtering   capacity   Seepage   Restricted   permeability   Slope	  1.00    1.00  0.46    0.37	Very limited   Seepage   Slope 	  1.00  1.00     
1023.				
192A: Worcester	Very limited   Depth to   saturated zone   Filtering   capacity   Seepage   Restricted   permeability	  1.00    1.00    1.00  0.46	  Very limited   Seepage   Depth to   saturated zone 	  1.00  1.00       
193A:			 	
Minocqua	Very limited    Depth to   saturated zone   Filtering   capacity   Seepage   Ponding   Restricted   permeability	  1.00    1.00  1.00  1.00  0.46	Very limited   Seepage   Depth to   saturated zone   Ponding   Content of   organic matter	  1.00  1.00    1.00  1.00 
215B: Pence	  Very limited		  Very limited	
rence	Very limited   Filtering   capacity   Seepage	  1.00    1.00	Very limited   Seepage   Slope 	  1.00  0.08 

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fields		Sewage lagoons   	
	Rating class and	Value		Value
	limiting features		limiting features	
0.1.5.				
215C:	  Very limited		  Tom: limited	
Pence	Filtering	1.00	Very limited   Seepage	1.00
	capacity	1	Slope	1.00
	Seepage	1.00	22020	
	Slope	0.37	i İ	İ
215D:	[	1		
Pence	Very limited		Very limited	
	Filtering	1.00	Slope	1.00
	capacity Slope	1.00	Seepage	1.00
	Seepage	1.00	 	
	beepage		 	
315A:	į	į	İ	i
Rib	Very limited		Very limited	
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity		Ponding	1.00
	Seepage   Ponding	1.00	 	l I
	Restricted	0.46	 	1
	permeability			
225				
337A: Plover	  Very limited		  Very limited	1
PIOVEL	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Seepage	0.53
	permeability	į		İ
	ļ.	!	[	
368B:				
Mahtomedi	Very limited		Very limited	
	Filtering   capacity	1.00	Seepage Slope	1.00
	Seepage	1.00	biope	0.32
				i
Cress	Very limited	į	Very limited	İ
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.32
	Seepage	1.00		
368C:			 	
Mahtomedi	  Very limited		  Very limited	1
Mancomear	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage	1.00		
	Slope	0.04	[	
Cress	  Very limited		  Very limited	
C1699	Very limited   Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage	1.00		
		1	1	1
	Slope	0.04		

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	ds	Sewage lagoons   	
	Rating class and	Value	Rating class and limiting features	Value
368D:			 	
Mahtomedi	Very limited	İ	  Very limited	
	Filtering	1.00	Slope	1.00
	capacity	[	Seepage	1.00
	Seepage   Slope	1.00  1.00		
Cress	  Very limited		  Very limited	
Cress	Filtering	1.00	Slope	1.00
	capacity		Seepage	1.00
	Seepage	1.00		
	Slope	1.00	 	
371A:				
Croswell	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage Depth to	1.00
	Filtering	1.00	saturated zone	1
	capacity			
	Seepage	1.00		į
380B:			 	
Cress	Very limited		Very limited	
	Filtering	1.00	Seepage	1.00
	capacity Seepage	1.00	Slope 	0.32
Rosholt			Very limited	
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.32
	Seepage   Restricted	1.00  0.46	 	I
	permeability			
380C:	 			
Cress	Very limited	į	Very limited	į
	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage   Slope	1.00		
Rosholt	  Very limited		  Very limited	
ROBIIOIC	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage	1.00	· -	į
	Restricted	0.46		
	permeability			
	Slope	0.04	[ 	
380D:	į	į		į
Cress	Very limited		Very limited	
	Filtering   capacity	1.00	Slope   Seepage	1.00
	Seepage	1.00	 	
	Slope	1.00		i
		İ		İ

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	   Septic tank   absorption fiel 	ds	   Sewage lagoons 	
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
2005				
380D: Rosholt	  Very limited		  Very limited	
KOBIIOIC	Filtering	1.00	Slope	1.00
	capacity	i	Seepage	1.00
	Seepage	1.00		
	Slope	1.00		
	Restricted permeability	0.46	 	
	permeability	l	 	
383B:		i		i
Mahtomedi	Very limited	İ	Very limited	İ
	Filtering	1.00		1.00
	capacity	1.00	Slope	0.08
	Seepage 	1.00	 	
383C:		i		i
Mahtomedi	Very limited	İ	Very limited	İ
	Filtering	1.00		1.00
	capacity	1.00	Slope	1.00
	Seepage   Slope	0.04	 	
				i
383D:	İ	İ	į	İ
Mahtomedi			Very limited	
	Filtering	1.00	Slope	1.00
	capacity Seepage	1.00	Seepage	1.00
	Slope	1.00		i
	İ	İ	İ	İ
396B:	 		 	
Friendship	Very limited   Filtering	1.00	Very limited   Seepage	1.00
	capacity		Depth to	0.17
	Seepage	1.00	saturated zone	i
	Depth to	0.84		
	saturated zone			
Wurtsmith	  Very limited		  Very limited	
	Depth to	1.00		1.00
	saturated zone	į	Depth to	1.00
	Filtering	1.00	saturated zone	!
	capacity			
	Seepage 	1.00	 	
Grayling	  Very limited	i	  Very limited	i
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.08
	Seepage	1.00	 	
397A:	 		! 	
Perchlake	  Very limited	i	  Very limited	į
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering   capacity	1.00	saturated zone	
	Capacity   Seepage	1.00	 	
			į	

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	ds	   Sewage lagoons 	ı
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
399B:			 	
Grayling	Very limited	į	Very limited	j
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.08
	Seepage	1.00	 	
399C:	 		 	
Grayling	Very limited	İ	  Very limited	İ
	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage	1.00		
	Slope	0.04	  -	
399D:			 	
	  Very limited	İ	  Very limited	İ
	Filtering	1.00	Slope	1.00
	capacity		Seepage	1.00
	Seepage	1.00		
	Slope	1.00	  -	
405A:			 	
Lupton	  Very limited	İ	  Very limited	İ
	Depth to	1.00	Content of	1.00
	saturated zone		organic matter	
	Subsidence	1.00	Depth to	1.00
	Seepage	1.00	saturated zone	
	Ponding	1.00	Seepage Ponding	1.00
			Ionaing	
Cathro	Very limited	į	Very limited	j
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Seepage	1.00
	Restricted permeability	0.72	Ponding Content of	1.00
	permeability		organic matter	1
		į		j
Tawas	Very limited	[	Very limited	
	Depth to	1.00	Seepage	1.00
	saturated zone	1.00	Depth to	1.00
	Filtering   capacity	1.00	saturated zone	1.00
	Subsidence	1.00		1.00
	Seepage	1.00	:	
	Ponding	1.00	İ	İ
		ļ		
406A:	 		 	
Loxley	Very limited   Depth to	1.00	Very limited   Content of	1.00
	saturated zone		organic matter	
	Filtering	1.00	Seepage	1.00
	capacity	İ	Depth to	1.00
	Subsidence	1.00	saturated zone	į
	Seepage   Ponding	1.00	Ponding	1.00

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	.ds	   Sewage lagoons 	3
	Rating class and limiting features	Value	Rating class and   limiting features	Value
407A: Seelyeville	  Very limited   Depth to   saturated zone   Seepage   Ponding	  1.00    1.00  1.00		  1.00    1.00    1.00
Markey	Very limited   Depth to   saturated zone   Filtering   capacity   Seepage   Ponding   Restricted   permeability	  1.00    1.00    1.00  1.00  0.46		  1.00  1.00    1.00  1.00
410A: Seelyeville	   Very limited   Depth to   saturated zone   Seepage   Ponding	  1.00    1.00  1.00	Very limited   Content of   organic matter   Depth to   saturated zone   Seepage   Ponding	  1.00    1.00    1.00
Cathro	   Very limited   Depth to   saturated zone   Ponding   Restricted   permeability	  1.00    1.00  0.72 	Very limited   Depth to   saturated zone   Seepage   Ponding   Content of   organic matter	  1.00    1.00  1.00
412A: Rifle	  Very limited   Depth to   saturated zone   Seepage   Ponding	  1.00    1.00  1.00	Very limited   Content of   organic matter   Seepage   Depth to   saturated zone   Ponding	  1.00    1.00  1.00 
Tacoosh	  Very limited   Depth to   saturated zone   Ponding   Restricted   permeability	  1.00    1.00  0.46	Very limited   Depth to   saturated zone   Seepage   Ponding   Content of   organic matter	  1.00    1.00  1.00
415A: Greenwood	  Very limited   Depth to   saturated zone   Subsidence   Seepage   Ponding	  1.00    1.00  1.00  1.00	organic matter Depth to saturated zone	  1.00    1.00    1.00  1.00

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	ds	Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
439B: Graycalm	  Very limited   Filtering   capacity   Seepage	      1.00    1.00	  Very limited   Seepage   Slope	      1.00  0.08
Menahga	   Very limited   Filtering   capacity   Seepage	  1.00    1.00	  Very limited   Seepage   Slope 	  1.00  0.08 
439C: Graycalm	Filtering capacity Seepage Slope Very limited Filtering capacity Seepage	1.00   1.00  0.04     1.00   1.00	Very limited   Seepage   Slope	  1.00  1.00          1.00  1.00
439D: Graycalm	Slope 	0.04        1.00    1.00	     Very limited   Slope   Seepage 	      1.00  1.00
Menahga	   Very limited   Filtering   capacity   Seepage   Slope	  1.00    1.00  1.00	  Very limited   Slope   Seepage 	  1.00  1.00 
441C: Freeon	Very limited   Depth to   saturated zone   Restricted   permeability   Slope	  1.00    1.00    0.37	Very limited   Depth to   saturated zone   Slope   Seepage	  1.00    1.00  0.53
Cathro	Very limited   Depth to   saturated zone   Ponding   Restricted   permeability	  1.00    1.00  0.72   	Very limited Depth to saturated zone Seepage Ponding Content of organic matter	  1.00    1.00  1.00  1.00
442C: Haugen	  Very limited   Depth to   saturated zone   Restricted   permeability	  1.00    1.00	  Very limited   Slope   Depth to   saturated zone   Seepage	  1.00  0.75    0.53

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	   Septic tank   absorption fiel	.ds	Sewage lagoons	
	Rating class and   limiting features	Value	   Rating class and   limiting features	Value
	!	[	!	Ţ
442C: Greenwood	  Very limited		  Town limited	-
Greenwood	Depth to	1.00	Very limited   Content of	1.00
	saturated zone		organic matter	
	Filtering	1.00	Depth to	1.00
	capacity		saturated zone	
	Seepage	1.00	Seepage	1.00
	Ponding	1.00	Ponding	1.00
443D:	 		 	i
Amery	Very limited	j	Very limited	į
	Slope	1.00	Slope	1.00
	Restricted	1.00	Seepage	0.53
	permeability	l l	 	
Greenwood	  Very limited		  Very limited	1
	Depth to	1.00	Content of	1.00
	saturated zone		organic matter	
	Filtering	1.00	Depth to	1.00
	capacity	1 00	saturated zone	
	Seepage   Ponding	1.00  1.00	Seepage Ponding	1.00
	Ionaing			
461A:	į	j	İ	į
Bowstring	Very limited		Very limited	1
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Seepage Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity	i	Ponding	1.00
	Subsidence	1.00	Content of	1.00
	Seepage	1.00	organic matter	
484A:	 	l l	 	
Greenwood	  Very limited		  Very limited	1
	Depth to	1.00	Content of	1.00
	saturated zone		organic matter	
	Filtering	1.00	Depth to	1.00
	capacity Seepage	1.00	saturated zone Seepage	1.00
	Ponding	1.00	Ponding	1.00
	İ	j		i
Beseman	Very limited		Very limited	1
	Depth to	1.00	Depth to	1.00
	saturated zone	1.00	saturated zone Seepage	1.00
	permeability	1	Beepage   Ponding	1.00
	Subsidence	1.00	Content of	1.00
	Ponding	1.00	organic matter	İ
4055				1
495B: Karlsborg	  Very limited	I	  Very limited	
warrabora	Restricted	1.00	Seepage	1.00
	permeability		Depth to	0.99
	Depth to	1.00	saturated zone	
	saturated zone		Slope	0.32
	Filtering	1.00		
	capacity	1.00	  -	1
	Seepage			

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	ds	Sewage lagoons   	
	Rating class and limiting features	Value	Rating class and limiting features	Value
		<u> </u>		[
495B: Grettum	  Very limited		  Very limited	
	Filtering	1.00	Seepage	1.00
	capacity	İ	Slope	0.32
	Seepage	1.00	Depth to	0.17
	Depth to saturated zone	0.84	saturated zone	
Perida	Very limited		Very limited	
	Restricted	1.00	Seepage	1.00
	permeability		Slope	0.32
	Depth to saturated zone	1.00	 	l
	Filtering	1.00		
	capacity	į		İ
	Seepage	1.00		
495C:	 		 	
Karlsborg	  Very limited	İ	  Very limited	İ
	Restricted	1.00	Seepage	1.00
	permeability		Slope	1.00
	Depth to	1.00	Depth to saturated zone	0.99
	saturated zone	1.00	saturated zone	l
	capacity		 	
	Seepage	1.00		į
	Slope	0.04	l I	
Grettum	  Very limited		  Very limited	
	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage	1.00	Depth to	0.17
	Depth to	0.84	saturated zone	
	saturated zone Slope	0.04		
				i
Perida	Very limited		Very limited	
	Restricted	1.00	Seepage	1.00
	permeability Depth to	1.00	Slope	1
	saturated zone			
	Filtering	1.00		j
	capacity			
	Seepage	1.00		
	Slope	0.04		
495D:				
Karlsborg	Very limited		Very limited	
	Restricted	1.00	Slope	1.00
	permeability Depth to	1.00	Seepage Depth to	1.00
	saturated zone		saturated zone	
	Filtering	1.00		i
	capacity			
	Seepage	1.00		
	Slope	1.00	I	

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	   Septic tank   absorption fiel 	ds	   Sewage lagoons   	
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
4055				
495D: Grettum	  Very limited		  Very limited	l I
GIECCUM	Filtering	1.00		1.00
	capacity	i	Seepage	1.00
	Seepage	1.00	Depth to	0.17
	Slope	1.00	saturated zone	
	Depth to	0.84		
	saturated zone		 	
Perida	  Very limited	i	  Very limited	İ
	Restricted	1.00	Slope	1.00
	permeability	İ	Seepage	1.00
	Depth to	1.00		
	saturated zone			
	Filtering	1.00	 	
	capacity   Seepage	1.00	 	l
	Slope	1.00	! 	
	j	j	İ	j
497A:	[		[	
Meenon	Very limited		Very limited	
	Restricted	1.00	Seepage	1.00
	permeability Depth to	1.00	Depth to saturated zone	1.00
	saturated zone			
	Filtering	1.00		i
	capacity			
	Seepage	1.00		
515A:	 		 	
	  Very limited	i	  Very limited	İ
	Depth to	1.00	: -	1.00
	saturated zone	į	Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity			
	Seepage	1.00	 	
521A:	 	İ	 	İ
Dody	  Very limited	i	  Very limited	i
	Restricted	1.00	Seepage	1.00
	permeability		Depth to	1.00
	Depth to	1.00	saturated zone	
	saturated zone	1.00	Ponding   Content of	1.00
	Filtering   capacity	1	organic matter	1
	Seepage	1.00		i
	Ponding	1.00	İ	j
	!		!	
524E:				
Rock outcrop	Not rated		Not rated	
Frogcreek	  Verv limited		  Very limited	
-9	Depth to	1.00	Depth to	1.00
	saturated zone	j	saturated zone	i
	Restricted	1.00	Slope	1.00
	permeability		Seepage	0.53

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	ds	Sewage lagoons	
	Rating class and limiting features	Value	Rating class and   limiting features	Value
524E:	į	İ		İ
Metonga	Very limited		Very limited	
	Depth to bedrock   Slope	1.00	Depth to hard bedrock	1.00
	Restricted	0.46	Slope	1.00
	permeability	į	Seepage	1.00
542B:	 		l	
Haugen, very stony	  Very limited		  Somewhat limited	
	Depth to	1.00	Depth to	0.75
	saturated zone		saturated zone	
	Restricted	1.00	Seepage	0.53
	permeability		Slope	0.32
Haugen	  Very limited		  Somewhat limited	
	Depth to	1.00	Depth to	0.75
	saturated zone		saturated zone	
	Restricted	1.00	Seepage	0.53
	permeability	1	Slope	0.32
542C:				
Haugen, very stony	Very limited		Very limited	
	Depth to	1.00	Slope	1.00
	saturated zone		Depth to	0.75
	Restricted permeability	1.00	saturated zone	0.53
	Slope	0.04	Seepage 	
	į	į		į
Haugen	Very limited		Very limited	
	Depth to saturated zone	1.00	Slope Depth to	1.00
	Restricted	1.00	saturated zone	0.75
	permeability		Seepage	0.53
	Slope	0.04		į
543B:	 		l	
Anigon	  Very limited		  Very limited	
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.32
	Seepage	1.00		ļ
	Restricted permeability	0.46	İ	
	bermeapility		 	
543C2:	İ	į	İ	j
Anigon	Very limited		Very limited	
	Filtering	1.00	Seepage	1.00
	capacity Seepage	1.00	Slope	1.00
	Restricted	0.46	 	l
	permeability			i
	Slope	0.04		į
544F:	 		 	
Menahga	  Very limited		  Very limited	
-	Filtering	1.00	Slope	1.00
	capacity		Seepage	1.00
	Slope	1.00		
	Seepage	1.00		

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	ds	Sewage lagoons   	
	Rating class and limiting features	Value	Rating class and   limiting features	Value
544F: Mahtomedi	Very limited Filtering capacity Slope Seepage	    1.00    1.00  1.00	  Very limited   Slope   Seepage 	    1.00  1.00
555A: Fordum	Very limited   Flooding   Depth to   saturated zone   Filtering   capacity   Seepage   Ponding	  1.00  1.00    1.00    1.00	   Very limited   Flooding   Seepage   Depth to   saturated zone   Ponding	  1.00  1.00  1.00    1.00
574B: Sayner	  Very limited   Filtering   capacity   Seepage	  1.00    1.00	  Very limited   Seepage   Slope	    1.00  0.08
574C: Sayner	  Very limited   Filtering   capacity   Seepage   Slope	    1.00    1.00  0.37	  Very limited   Seepage   Slope 	      1.00  1.00
574E: Sayner	  Very limited   Filtering   capacity   Slope   Seepage	    1.00    1.00  1.00	  Very limited   Slope   Seepage 	    1.00  1.00
579B: Parkfalls	  Very limited   Depth to   saturated zone   Restricted   permeability	  1.00    1.00	  Very limited   Depth to   saturated zone   Seepage	  1.00    0.53
600A: Haplosaprists Psammaquents		     	  Not rated    Not rated	
615B: Cress		    1.00    1.00	 	    1.00  0.08
615C: Cress	  Very limited   Filtering   capacity   Seepage   Slope	  1.00    1.00  0.04	  Very limited   Seepage   Slope 	  1.00  1.00   

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank     absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and   limiting features	Value
615D:				
	  Very limited	1	  Very limited	1
02000	Filtering	1.00		1.00
	capacity	į	Seepage	1.00
	Seepage	1.00		
	Slope	1.00	  -	
623A:	 	 	 	 
Capitola	  Very limited		  Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone	ĺ	saturated zone	ĺ
	Ponding	1.00	Ponding	1.00
		ļ	Content of	1.00
			organic matter	
	 		Seepage	0.53
624A:	 	i	 	i
	  Very limited	İ	  Very limited	İ
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity			ļ
	Seepage   Restricted	1.00	 	
	permeability	0.46	 	l I
	permeability		 	
632A:	j	į	İ	į
Aftad	Very limited		Very limited	
	Depth to	1.00		1.00
	saturated zone		saturated zone	
	Restricted permeability	1.00	Seepage	0.53
	permeability	İ		i
632B:		į		į
Aftad	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Seepage	0.53
	permeability	1	Slope 	0.32
632C:		İ		İ
Aftad	Very limited	į	Very limited	į
	Depth to	1.00	Slope	1.00
	saturated zone		Depth to	0.99
	Restricted	1.00	!	
	permeability	0.04	Seepage	0.53
	Slope 		 	
633F:				
Pence	Very limited		Very limited	
	Filtering	1.00	Slope	1.00
	capacity		Seepage	1.00
	Slope	1.00	 	
	Seepage 	1.00	 	
	I	1	I	1

Table 19a.--Sanitary Facilities--Continued

absorption fiel	ds	Sewage lagoons	
Rating class and limiting features	Value	Rating class and limiting features	Value
Very limited Filtering capacity	1.00	  Very limited   Slope   Seepage	  1.00  1.00
Slope Seepage Restricted permeability	1.00  1.00  0.46	  -  - 	     
	İ		
Very limited Depth to saturated zone Seepage Restricted permeability		_	  1.00  0.99    0.32
	i		
Very limited Seepage Slope	1	-	  1.00  1.00
Very limited Filtering capacity Seepage Slope	  1.00    1.00  0.37	   Very limited   Seepage   Slope 	  1.00  1.00 
Very limited Slope Seepage	1.00	Slope	  1.00  1.00
	į		
Filtering capacity	1.00	Slope   Seepage	1.00
Slope Seepage	1.00		
Very limited Depth to	1.00	· -	1.00
saturated zone Restricted permeability	1.00	Depth to saturated zone	0.75
Very limited		  Verv limited	
Depth to	1.00	Seepage	1.00
Restricted permeability	1.00	Depth to   saturated zone   Slope	0.75    0.32
Very limited Depth to	1.00	Somewhat limited   Depth to	0.75
saturated zone Filtering	1.00	saturated zone Seepage	0.53
capacity Restricted	1.00	Slope	0.32
	Rating class and limiting features  Very limited Filtering capacity Slope Seepage Restricted permeability  Very limited Depth to saturated zone Seepage Restricted permeability  Very limited Seepage Slope  Very limited Filtering capacity Seepage Slope  Very limited Slope Seepage  Very limited Filtering capacity Slope Seepage  Very limited Filtering capacity Slope Seepage  Very limited Filtering capacity Slope Seepage  Very limited Depth to saturated zone Restricted permeability  Very limited Depth to saturated zone Restricted permeability  Very limited Depth to saturated zone Restricted permeability  Very limited Depth to saturated zone Restricted permeability  Very limited Depth to saturated zone Restricted permeability	Rating class and limiting features  Very limited Filtering   1.00   capacity   Slope   1.00   Restricted   permeability  Very limited   Depth to   saturated zone   Seepage   1.00   Restricted   0.46   permeability  Very limited   Seepage   1.00   Restricted   0.46   permeability  Very limited   Seepage   1.00   Saturated zone   Seepage   1.00   Saturated zone   Seepage   1.00   Saturated zone   Slope   0.37   Very limited   Slope   1.00   Seepage   1.00   Seepage   1.00   Very limited   Filtering   1.00   Capacity   Slope   1.00   Seepage   1.00   Very limited   Filtering   1.00   Capacity   Slope   1.00   Seepage   1.00   Very limited   Depth to   saturated zone   Restricted   1.00   Permeability   Very limited   Depth to   saturated zone   Restricted   1.00   Permeability   Very limited   Depth to   saturated zone   Restricted   1.00   Permeability   Very limited   Depth to   saturated zone   Restricted   1.00   Permeability   Very limited   Depth to   saturated zone   Restricted   1.00   Permeability   Very limited   Depth to   saturated zone   Restricted   1.00   Permeability   Very limited   Depth to   saturated zone   Filtering   1.00   Capacity   Restricted   1.00   Capacity   Restricted   1.00   Capacity   Restricted   1.00   Capacity	Rating class and limiting features   Value   Rating class and limiting features   Very limited   Very limited   Seepage   Seep

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	ds	   Sewage lagoons 	
	Rating class and limiting features	Value	Rating class and limiting features	Value
680B: Pence, stony	  Very limited   Filtering   capacity   Seepage	      1.00    1.00	  Very limited   Seepage   Slope	    1.00  0.32
683A: Tipler	Very limited   Depth to   saturated zone   Filtering   capacity   Seepage   Restricted   permeability	  1.00    1.00    1.00  0.46	  Very limited   Seepage   Depth to   saturated zone	  1.00  1.00       
706A: Winterfield	  Very limited   Flooding   Depth to   saturated zone   Filtering   capacity   Seepage	  1.00  1.00    1.00 	  Very limited   Flooding   Seepage   Depth to   saturated zone	  1.00  1.00  1.00 
Totagatic	  Very limited   Flooding   Depth to   saturated zone   Filtering   capacity   Seepage   Ponding	  1.00  1.00    1.00    1.00	   Very limited   Flooding   Seepage   Depth to   saturated zone   Ponding	  1.00  1.00  1.00    1.00
724A: Rib	Very limited   Depth to   saturated zone   Filtering   capacity   Seepage   Ponding   Restricted   permeability	   1.00   1.00   1.00   1.00   0.46	  Very limited   Seepage   Depth to   saturated zone   Ponding	    1.00  1.00    1.00 
Rock outcrop 726B: Sissabagama	 	        1.00    1.00	Not rated	        1.00      0.08

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	   Septic tank   absorption fiel	ds	   Sewage lagoons 	
	   Rating class and   limiting features	Value	   Rating class and   limiting features	Value
	[	!	[	ļ
733A:	 		 	
Wozny	Very limited   Depth to	1.00	Very limited   Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00
	Restricted	0.46	Content of	1.00
	permeability 		organic matter	  0.53
771A:	 		 	
	  Very limited		  Very limited	
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	ļ
	capacity Seepage	  1.00	 	
827A:	 	 	 	 
	  Very limited	i	  Very limited	i
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity Seepage	1.00	 	
	Restricted	0.46	 	i
	permeability	į		į
	!	ļ	!	ļ
853C:	 		 	
Frogcreek	Very limited   Depth to	1.00	Very limited   Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Slope	1.00
	permeability		Seepage 	0.53
Stinnett	  Very limited	į	  Very limited	į
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted permeability	1.00	Seepage 	0.53
Wozny	Very limited   Depth to	1.00	Very limited   Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00
	Restricted	0.46	Content of	1.00
	permeability	l I	organic matter Seepage	0.53
	 		beepage 	
856B:	[		[	
Stinnett			Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted	1.00	Seepage	0.53
	permeability			
857B:	 	 	 	 
Frogcreek	  Very limited	İ	  Very limited	İ
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted permeability	1.00	Seepage   Slope	0.53
	bermeaniirth		   probe	
	'		'	

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	.ds	Sewage lagoons		
	Rating class and limiting features	Value	Rating class and   limiting features	Value	
857C: Frogcreek	  Very limited   Depth to   saturated zone   Restricted   permeability	    1.00    1.00	  Very limited   Depth to   saturated zone   Slope   Seepage	    1.00    1.00  0.53	
	Slope	0.16			
873B: Stanberry	   Very limited   Depth to   saturated zone   Filtering   capacity   Restricted	  1.00    1.00 	Somewhat limited   Depth to   saturated zone   Seepage   Slope	  0.75    0.53  0.32	
873C: Stanberry	permeability  Very limited  Depth to saturated zone Filtering capacity Restricted permeability Slope	    1.00    1.00    1.00	  Very limited   Slope   Depth to   saturated zone   Seepage	      1.00  0.75    0.53	
873D: Stanberry	   Very limited   Depth to   saturated zone   Filtering   capacity   Slope   Restricted   permeability	    1.00    1.00    1.00	  Very limited   Slope   Depth to   saturated zone   Seepage	    1.00  0.75    0.53	
905A: Cublake	Very limited Depth to saturated zone Filtering capacity Restricted permeability	    1.00    1.00    0.72	   Very limited   Seepage   Depth to   saturated zone	    1.00  1.00 	
926A: Flink	Very limited   Depth to   saturated zone   Filtering   capacity   Restricted   permeability	  1.00    1.00    0.72	  Very limited   Seepage   Depth to   saturated zone	  1.00  1.00     	

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	ds	   Sewage lagoons   	1
	Rating class and limiting features	Value	Rating class and limiting features	Value
943D: Stanberry	  Very limited		  Very limited	
beamberry	Depth to	1.00	Slope	1.00
	saturated zone	j	Depth to	0.75
	Filtering	1.00	saturated zone	
	capacity Restricted	1.00	Seepage	0.53
	permeability	1	 	1
	Slope	1.00		
Greenwood	  Very limited		  Very limited	
	Depth to	1.00	Content of	1.00
	saturated zone		organic matter	
	Ponding   Restricted	1.00	Depth to saturated zone	1.00
	permeability		Ponding	1.00
			Seepage	0.53
948A:				
Billyboy	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity	j		j
	Seepage	1.00		
	Restricted permeability	0.46		
970C:				
Keweenaw	  Very limited	i	  Very limited	
	Seepage	1.00	Seepage	1.00
	Slope	0.37	Slope 	1.00
Pence	  Very limited		  Very limited	İ
	Filtering	1.00	Seepage	1.00
	capacity Seepage	1.00	Slope	1.00
	Slope	0.37		
Greenwood	  Very limited		  Very limited	
	Depth to	1.00	Content of	1.00
	saturated zone		organic matter	
	Filtering   capacity	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Seepage	1.00
	Ponding	1.00	Ponding	1.00
970E:			 	
Keweenaw	-		Very limited	
	Slope	1.00	Slope	1.00
	Seepage 	1.00	Seepage 	1.00
Pence	Very limited		Very limited	į
	Filtering	1.00	Slope	1.00
	capacity Slope	1.00	Seepage	1.00
	Seepage	1.00	 	
	İ	İ	İ	İ

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons   	
	Rating class and limiting features	Value	Rating class and limiting features	Value
970E: Greenwood	  Very limited		  Very limited	
GI eeiiwood	Depth to	1.00	Content of	1.00
	saturated zone		organic matter	
	Filtering	1.00	Depth to	1.00
	capacity		saturated zone	
	Seepage	1.00	Seepage	1.00
	Ponding	1.00	Ponding	1.00
1070C:	 		]	
	  Very limited		  Very limited	l
I I CAMB CACC	Seepage	1.00	Seepage	1.00
	Slope	0.16	Slope	1.00
	j	İ		j
Cress	Very limited	İ	Very limited	
	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage   Slope	1.00	]	
	blope			
1070D:		İ		
Fremstadt	Very limited	į	Very limited	İ
	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00
<b>G</b>	 			
Cress	Very limited   Filtering	1.00	Very limited   Slope	1.00
	capacity	1	Siope   Seepage	1.00
	Seepage	1.00		
	Slope	1.00		j
1080B:				
Spoonerhill	· -		Very limited	
	Depth to saturated zone	1.00	Seepage Depth to	1.00  0.75
	Restricted	1.00	saturated zone	
	permeability		Slope	0.32
		İ		İ
Spoonerhill, stony	-	[	Very limited	
	Depth to	1.00	Seepage	1.00
	saturated zone	1.00	Depth to saturated zone	0.75
	permeability	1	Slope	0.32
	permeability			
Cress	  Very limited	į	  Very limited	İ
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.08
	Seepage	1.00		
1653C:	 	 	 	
Stanberry	  Very limited		  Very limited	
<u>.</u>	Depth to	1.00	Slope	1.00
	saturated zone		Depth to	0.75
	Filtering	1.00	saturated zone	
	capacity		Seepage	0.53
	Restricted	1.00	l	
	permeability   Slope	0.04	 	I
	PTOPE	0.01	I	1

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	   Septic tank   absorption fiel 	ds	   Sewage lagoons   	1
	Rating class and limiting features	Value	Rating class and limiting features	Value
1653C: Parkfalls	  Very limited   Depth to   saturated zone   Restricted   permeability	    1.00    1.00	  Very limited   Depth to   saturated zone   Seepage	    1.00    0.53
Wozny	Very limited   Depth to   saturated zone   Ponding   Restricted   permeability	  1.00    1.00  0.46	Very limited   Depth to   saturated zone   Ponding   Content of   organic matter   Seepage	  1.00    1.00  1.00      0.53
2015:	_		_	į
Pits	Not rated 		Not rated 	
2050: Landfill	  Not rated 	 	  Not rated 	 
3011A: Barronett	Very limited   Depth to   saturated zone   Restricted   permeability   Ponding	  1.00    1.00 	   Very limited   Depth to   saturated zone   Ponding   Seepage	  1.00    1.00  0.53
3125A: Meehan	   Very limited   Depth to   saturated zone   Filtering   capacity   Seepage	  1.00    1.00    1.00	  Very limited   Seepage   Depth to   saturated zone	    1.00  1.00 
3126A: Wurtsmith	   Very limited   Depth to   saturated zone   Filtering   capacity   Seepage	  1.00    1.00    1.00	  Very limited   Seepage   Depth to   saturated zone	    1.00  1.00 
3276A: Au Gres	  Very limited   Depth to   saturated zone   Filtering   capacity   Seepage	    1.00    1.00    1.00	Depth to	  1.00  1.00 
3312B: Glendenning, very stony	  Very limited   Depth to   saturated zone   Restricted   permeability	    1.00    1.00	  -   Very limited   Depth to   saturated zone   Seepage	    1.00    0.53

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons   		
	Rating class and   limiting features	Value	Rating class and limiting features	Value	
	ĺ	İ	ĺ	İ	
3312B:	 		 		
Glendenning	very limited   Depth to	1.00	Very limited   Depth to	1.00	
	saturated zone		saturated zone		
	Restricted	1.00	Seepage	0.53	
	permeability	į		į	
3336A:	 		 		
Fenander	  Very limited		  Very limited	i	
	Depth to	1.00	Depth to	1.00	
	saturated zone	į	saturated zone	į	
	Restricted	1.00	Ponding	1.00	
	permeability		Seepage	0.53	
	Ponding	1.00	l		
3403A:	 		 		
Loxley	Very limited	İ	Very limited	İ	
	Depth to	1.00	Content of	1.00	
	saturated zone		organic matter		
	Filtering	1.00	Seepage	1.00	
	capacity		Depth to	1.00	
	Subsidence	1.00	saturated zone	1.00	
	Seepage Ponding	1.00	Ponding 		
		į		į	
Beseman	Very limited	:	Very limited		
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	
	Restricted	1.00	Seepage	1.00	
	permeability		Ponding	1.00	
	Subsidence	1.00	Content of	1.00	
	Ponding	1.00	organic matter	į	
Dawson	  Very limited		  Very limited		
245011	Depth to	1.00	Seepage	1.00	
	saturated zone		Depth to	1.00	
	Filtering	1.00	saturated zone	j	
	capacity		Ponding	1.00	
	Subsidence	1.00	Content of	1.00	
	Seepage	1.00	organic matter		
	Ponding 	1.00	 		
3424C:		İ		İ	
Frogcreek		1	Very limited		
	Depth to	1.00	Depth to	1.00	
	saturated zone		saturated zone		
	Restricted permeability	1.00	Slope   Seepage	1.00	
	permeability		Scopage		
Magroc	Very limited	İ	  Very limited	İ	
	Depth to	1.00	Depth to	1.00	
	saturated zone	[	saturated zone		
	Depth to bedrock	0.78	Seepage	1.00	
	Restricted permeability	0.50	Depth to hard bedrock	0.42	

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank   absorption fiel	ds	Sewage lagoons   		
	Rating class and	Value	Rating class and	Value	
	limiting features	<u> </u>	limiting features	<u> </u>	
3424C:	 		 		
Stinnett	  Very limited	i	  Very limited	i	
	Depth to	1.00	Depth to	1.00	
	saturated zone		saturated zone	1	
	Restricted	1.00	Seepage	0.53	
	permeability		 		
Rock outcrop.					
3446A:	 	1	 		
Newson	  Very limited		  Very limited	i	
	Depth to	1.00	_	1.00	
	saturated zone	į	Depth to	1.00	
	Filtering	1.00	saturated zone		
	capacity	1	Ponding	1.00	
	Seepage	1.00	Content of	1.00	
	Ponding	1.00	organic matter		
3448B:					
	  Very limited		  Very limited		
02000	Filtering	1.00	Seepage	1.00	
	capacity		Depth to	0.17	
	Seepage	1.00	saturated zone	į	
	Depth to	0.84	Slope	0.08	
	saturated zone	!		!	
3448C:	 		 		
	  Very limited		  Very limited		
GI et tum	Filtering	1.00	Seepage	1.00	
	capacity		Slope	1.00	
	Seepage	1.00	Depth to	0.17	
	Depth to	0.84	saturated zone	į	
	saturated zone				
	Slope	0.04		!	
25163					
3516A: Slimlake	  Very limited		  Very limited		
DIIMIARE	Depth to	1.00	Seepage	1.00	
	saturated zone		Depth to	1.00	
	Filtering	1.00	saturated zone	İ	
	capacity	İ		İ	
	Seepage	1.00			
2522					
3629B:	  Town limited		  Tom: limited		
Perida	Restricted	1.00	Very limited   Seepage	1.00	
	permeability		beepage		
	Depth to	1.00		i	
	saturated zone	i		i	
	Filtering	1.00		İ	
	capacity				
	Seepage	1.00			
M-W:	[ 		[ 		
4/4 - 44 ÷	  Not moted		  Not rated	1	
Miscellaneous water					
Miscellaneous water	Not rated	i		i	
Miscellaneous water	   	 		į į	

## Table 19b.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Trench sanitar	Y	Area sanitary		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
3A:						
Totagatic	· -	1 00	Very limited	:	Very limited	11 00
	Flooding   Depth to	1.00	Flooding	1.00	· -	1.00
	saturated zone	11.00	Depth to saturated zone	1.00		1.00
	Seepage	1.00	Seepage	1.00	Too sandy Seepage	1.00
	Too sandy	1.00	Ponding	1.00		1.00
	Ponding	1.00	Foliating		Foliating	
Bowstring	  Very limited		  Very limited		  Very limited	
	Flooding	1.00	Flooding	1.00	Depth to	1.00
	Depth to	1.00	Depth to	1.00	saturated zone	
	saturated zone		saturated zone		Content of	1.00
	Content of	1.00	Seepage	1.00	organic matter	
	organic matter		Ponding	1.00	_	1.00
	Seepage	1.00			Seepage	0.16
	Ponding	1.00	 			
Ausable	Very limited	i	Very limited	i	Very limited	i
	Flooding	1.00	Flooding	1.00	Depth to	1.00
	Depth to	1.00	Depth to	1.00	saturated zone	
	saturated zone		saturated zone		Too sandy	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	l			
22A:						
Comstock	· -	1	Very limited	:	Very limited	
	Depth to	1.00	Depth to	1.00	-	1.00
	saturated zone		saturated zone		saturated zone	
24A:				į		
Poskin	· -	1	Very limited	:	Very limited	
	Depth to	1.00	-	1.00	-	1.00
	saturated zone	11 00	saturated zone	1 00	saturated zone	11 00
	Seepage   Too sandy	1.00  1.00	Seepage 	1.00 	Too sandy Seepage	1.00  1.00
27A:			 			
Scott Lake	Very limited	i	  Very limited	i	  Very limited	i
	Depth to	1.00	Depth to	1.00	Too sandy	1.00
	saturated zone	i	saturated zone	i	Seepage	1.00
	Seepage	1.00	Seepage	1.00	Depth to	0.47
	Too sandy	1.00			saturated zone	
	 		 	 	Gravel content	0.09
28B:						
Haugen, very stony	_		Somewhat limited	:	Somewhat limited	
	Depth to	0.99	Depth to	0.75	Depth to	0.86
	saturated zone		saturated zone		saturated zone	
	1	1		1	Gravel content	0.01

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary     landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and	Value	Rating class and	Value	Rating class and limiting features	Value
	limiting features	1	IIMICING TEACUTES	<u> </u>	IIMICING TEACUTES	<del>                                     </del>
28B:		İ		İ		i
Haugen	Very limited		Somewhat limited		Somewhat limited	
	Depth to	0.99	Depth to	0.75	Depth to	0.86
	saturated zone	1	saturated zone		saturated zone	1
				ļ	Gravel content	0.01
Rosholt, very stony	  Town limited		   Warr limited		  Very limited	
ROSHOIC, Very Scony	Seepage	1.00	Very limited   Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	beepage	1	Seepage	1.00
				i	Gravel content	0.06
	İ	į		į		į
Rosholt	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
					Gravel content	0.02
28C:	 		 	l i	 	1
Haugen, very stony	  Verv limited		  Somewhat limited	i	  Somewhat limited	ì
	Depth to	0.99		0.75		0.86
	saturated zone	İ	saturated zone	İ	saturated zone	i
	Slope	0.04	Slope	0.04	Slope	0.04
					Gravel content	0.01
		!		ļ		ļ
Haugen		!	Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.99	Depth to saturated zone	0.75	Depth to saturated zone	0.86
	Slope	0.04	Slope	0.04	Slope	0.04
	Siope		Siope		Gravel content	0.01
		İ		İ		
Rosholt, very stony	Very limited	į	Very limited	į	Very limited	į
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.04	Seepage	1.00
	Slope	0.04		ļ	Gravel content	0.06
	 		l I		Slope	0.04
Rosholt	  Very limited		  Very limited		  Very limited	1
Nobiloze	Seepage	1.00	Seepage	1.00	: -	1.00
	Too sandy	1.00	Slope	0.04	Seepage	1.00
	Slope	0.04	· -	į	Slope	0.04
					Gravel content	0.02
		!		ļ		ļ
33B:						
Chetek	Seepage	1.00	Very limited   Seepage	1.00	Very limited   Too sandy	1.00
	Too sandy	1.00	Beepage	1	Seepage	1.00
				i	Gravel content	0.11
	İ	į		į		į
33C:						
Chetek	: -		Very limited	1	Very limited	1
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.04		1.00
	Slope 	0.04	 	I I	Gravel content Slope	0.11
	 		 		   proĥe	0.04
38A:		i		i		i
Rosholt	Very limited	İ	  Very limited	į	Very limited	İ
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
					Gravel content	0.02

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		   Daily cover for   landfill		
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
38B: Rosholt	    Very limited   Seepage   Too sandy	      1.00  1.00	    Very limited   Seepage   	      1.00   	   Very limited   Too sandy   Seepage   Gravel content	    1.00  1.00  0.02	
38C: Rosholt	  Very limited   Seepage   Too sandy   Slope	    1.00  1.00  0.04	  Very limited   Seepage   Slope 	    1.00  0.04 		  1.00  1.00  0.04  0.02	
38D: Rosholt	  Very limited   Seepage   Too sandy   Slope 	  1.00  1.00  1.00	  Very limited   Seepage   Slope 	  1.00  1.00 		  1.00  1.00  1.00  0.02	
42D: Amery	  Very limited   Slope 	    1.00 	  Very limited   Slope 	    1.00 	  Very limited   Slope   Gravel content	  1.00  0.02	
43B: Antigo	  Very limited   Seepage   Too sandy	    1.00  1.00	  Very limited   Seepage 	    1.00 	  Very limited   Too sandy   Seepage	    1.00  1.00	
43C: Antigo	  Very limited   Seepage   Too sandy   Slope	  1.00  1.00  0.37	  Very limited   Seepage   Slope	    1.00  0.37 	-	  1.00  1.00  0.37	
43D: Antigo	  Very limited   Slope   Seepage   Too sandy	    1.00  1.00  1.00	  Very limited   Slope   Seepage 	    1.00  1.00		    1.00  1.00  1.00	
48A: Brill	  Very limited   Depth to   saturated zone   Seepage   Too sandy	  1.00    1.00  1.00	  Very limited   Seepage   Depth to   saturated zone	  1.00  0.99 	   Very limited   Too sandy   Seepage   Depth to   saturated zone	  1.00  1.00  0.99	
63A: Crystal Lake	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00 	  Somewhat limited   Depth to   saturated zone	    0.86 	
63B: Crystal Lake	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00   	  Somewhat limited   Depth to   saturated zone	    0.86   	

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	Trench sanitary landfill			Daily cover for	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
63C:	l I		 	 	 	
Crystal Lake	Depth to	1.00		1.00		0.86
	saturated zone   Slope	0.04	saturated zone	0.04	saturated zone	0.04
63E: Crystal Lake	  Very limited		  Very limited		  Very limited	l I
01/2001 1000	Depth to	1.00	: - <del>-</del>	1.00		1.00
	saturated zone	į	Depth to	1.00	Depth to	0.47
	Slope	1.00	saturated zone		saturated zone	
64A:			 		 	
Totagatic	: - T	1	Very limited	1	Very limited	İ
	Flooding	1.00		1.00		1.00
	Depth to	1.00		1.00	!	
	saturated zone Seepage	1.00	saturated zone Seepage	1.00	Too sandy Seepage	1.00
	Too sandy	1.00		1.00		1.00
	Ponding	1.00				
Winterfield	  Verv limited		  Very limited		  Very limited	
	Flooding	1.00	: - <del>-</del>	1.00	: -	1.00
	Depth to	1.00		1.00		i
	saturated zone	İ	saturated zone	ĺ	Too sandy	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00	 		 	
69B:	İ					
Keweenaw	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Seepage	1.00		0.50
	Too sandy	0.50	 		Seepage 	0.22
Sayner	Very limited	i	  Very limited	i	  Very limited	İ
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
	 		 		Gravel content	0.07
Vilas	Very limited		  Very limited		  Very limited	İ
	Seepage	1.00	Seepage	1.00	!	1.00
	Too sandy	1.00	 		Seepage	1.00
69C:						
Keweenaw	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Seepage	1.00	Too sandy	0.50
	Too sandy	0.50	Slope	0.16		0.22
	Slope	0.16	 		Slope 	0.16
Sayner	Very limited	į	Very limited	į	Very limited	į
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.16	Seepage	1.00
	Slope	0.16	 		Slope Gravel content	0.16  0.03
****						
Vilas	: -	1 00	Very limited	1 00	Very limited	1 00
	Seepage   Too sandy	1.00  1.00	Seepage Slope	1.00	Too sandy Seepage	1.00
	Slope	0.16			Slope	0.16
	i	i	İ	İ	į -	İ

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary   landfill		Area sanitary landfill	•	Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and   limiting features		Rating class and limiting features	Value
	IIMICING Teacures	1	IIMICING Teacures	1	IIMICING Teacures	1
69E:				İ		İ
Keweenaw	Very limited	İ	Very limited	İ	Very limited	ĺ
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	0.50
	Too sandy	0.50			Seepage	0.22
_						
Sayner	· -		Very limited	1.00	Very limited	1.00
	Slope   Seepage	1.00	Slope   Seepage	1.00		1.00
	Too sandy	1.00	beepage	1	Seepage	1.00
	100 banay		! 		Gravel content	0.03
		İ		İ		
Vilas	Very limited	j	Very limited	į	Very limited	j
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
74B:						
Vilas	Very limited   Seepage	1.00	Very limited   Seepage	1.00	Very limited   Too sandy	1.00
	Too sandy	1.00	seepage	1.00	Seepage	1.00
	100 Sandy			İ	beepage	1
74C:					 	
Vilas	Very limited	i	Very limited	i	  Very limited	i
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.37	Seepage	1.00
	Slope	0.37			Slope	0.37
74D:	 		 		 	
Vilas	Slope	1.00	Very limited   Slope	1.00	Very limited	1.00
	Seepage	1.00	Seepage	1.00	Slope   Too sandy	1.00
	Too sandy	1.00	beepage		Seepage	1.00
				İ		
100B:	İ	İ	İ	į	İ	j
Menahga	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
100C: Menahga	  Town limited		  Very limited		  Very limited	
menanga	Seepage	1.00	Seepage	1.00		1.00
	Too sandy	1.00	Slope	0.04		1.00
	Slope	0.04			Slope	0.04
				İ		
100D:				İ	İ	
Menahga	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00		1.00
	Slope	1.00			Slope	1.00
1270.	 	1	] 	1	 	
127D: Amery	  Very limited	1	  Very limited	1	  Very limited	I I
TWET A	Slope	1.00	Slope	1.00	Slope	1.00
					Gravel content	0.02
	İ	İ	İ	i		ĺ
Rosholt	Very limited		  Very limited		  Very limited	Ì
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
	1	1	i .	1	Gravel content	0.06

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
127E:	    Very limited	   	    Very limited	   	    Very limited	
,	Slope	1.00	: -	1.00	: -	1.00
Rosholt	· -	1	  Very limited	1	  Very limited	
	Slope	1.00	:	1.00	<u>-</u>	1.00
	Seepage	1.00	Seepage	1.00	:	1.00
	Too sandy	1.00	 		Seepage   Gravel content	0.06
156B:						
Magnor, very stony	-	1	Very limited	1	Very limited	
		1.00	Depth to	1.00		1.00
	saturated zone		saturated zone		saturated zone	
Magnor	· -	1	Very limited	1	Very limited	
	Depth to   saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
157B:						
Freeon, very stony	-		Very limited	1	Very limited	
	Depth to	1.00		1.00		1.00
	saturated zone		saturated zone		saturated zone	
Freeon	· -	1	Very limited	1	Very limited	
	Depth to   saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
157C:			 		 	
Freeon, very stony	· -	1	Very limited	1	Very limited	
	Depth to	1.00	Depth to	1.00		1.00
	saturated zone		saturated zone		saturated zone	
	Slope 	0.04 	Slope 	0.04	Slope 	0.04
Freeon	· -	1	Very limited	1	Very limited	
	Depth to	1.00		1.00	· -	1.00
	saturated zone	0.04	saturated zone	0.04	saturated zone	0.04
160A:			 		 	
Oesterle	Very limited		Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	 		Seepage   Gravel content	1.00
182B:	 		 		 	
Padus	Very limited		Very limited	[	Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00 	 		Seepage	1.00
182C: Padus	  Very limited		  Very limited		  Very limited	
	Seepage	1.00	Seepage	1.00		1.00
		11 00	01	0.37		11 00
	Too sandy	1.00	Slope	0.37	Seepage	1.00

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary     landfill		Area sanitary   landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
192A: Worcester	  Very limited   Depth to   saturated zone   Seepage   Too sandy	    1.00    1.00 	  Very limited   Depth to   saturated zone   Seepage 	      1.00    1.00	  Very limited   Depth to   saturated zone   Too sandy   Seepage   Gravel content	    1.00    1.00  1.00  0.04
193A: Minocqua	  Very limited   Depth to   saturated zone   Seepage   Too sandy   Ponding	    1.00    1.00  1.00	  Very limited   Depth to   saturated zone   Seepage   Ponding	    1.00    1.00  1.00	Very limited   Depth to   saturated zone   Too sandy   Seepage   Ponding   Gravel content	    1.00    1.00  1.00  1.00
215B: Pence	  Very limited   Seepage   Too sandy 	    1.00  1.00	  Very limited   Seepage 	1.00	  Very limited   Too sandy   Seepage   Gravel content	  1.00  1.00  0.16
215C: Pence	  Very limited   Seepage   Too sandy   Slope	  1.00  1.00  0.37	  Very limited   Seepage   Slope 	1.00	   Very limited   Too sandy   Seepage   Slope   Gravel content	  1.00  1.00  0.37  0.16
215D: Pence	  Very limited   Slope   Seepage   Too sandy	    1.00  1.00  1.00	  Very limited   Slope   Seepage	    1.00  1.00	  Very limited   Slope   Too sandy   Seepage   Gravel content	  1.00  1.00  1.00  0.16
315A: Rib	  Very limited   Depth to   saturated zone   Seepage   Too sandy   Ponding	    1.00    1.00  1.00	  Very limited   Depth to   saturated zone   Seepage   Ponding	    1.00    1.00  1.00	  Very limited   Depth to   saturated zone   Too sandy   Seepage   Ponding	    1.00    1.00  1.00
337A: Plover	  Very limited   Depth to   saturated zone   Too sandy	  1.00    1.00	  Very limited   Depth to   saturated zone	1.00	  Very limited   Depth to   saturated zone   Too sandy	  1.00    1.00
368B: Mahtomedi	  Very limited   Seepage   Too sandy	  1.00  1.00	  Very limited   Seepage 	1.00	  Very limited   Too sandy   Seepage   Gravel content	  1.00  1.00  0.01
Cress	  Very limited   Seepage   Too sandy 	  1.00  1.00 	  Very limited   Seepage 	1.00	   Too sandy   Seepage   Gravel content	  1.00  1.00  0.02

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover fo	Daily cover for landfill	
	Rating class and	Value	Rating class and	Value	Rating class and	Value	
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>	
368C:	 		 		 		
Mahtomedi	  Very limited	i	  Very limited	i	  Very limited	i	
	Seepage	1.00	: -	1.00	Too sandy	1.00	
	Too sandy	1.00	Slope	0.04	Seepage	1.00	
	Slope	0.04			Slope	0.04	
					Gravel content	0.01	
Cress	  Verv limited		  Very limited		  Very limited		
	Seepage	1.00		1.00		1.00	
	Too sandy	1.00		0.04	:	1.00	
	Slope	0.04	i -	i	Slope	0.04	
	į	İ	İ	İ	Gravel content	0.02	
2.62				ļ		!	
368D: Mahtomedi	  Verv limited		  Very limited		  Very limited		
	Seepage	1.00	: -	1.00		1.00	
	Too sandy	1.00	Slope	1.00	:	1.00	
	Slope	1.00	. <u>.</u>	İ	Slope	1.00	
	j	į	İ	į	Gravel content	0.01	
_							
Cress		!	Very limited	1	Very limited		
	Seepage	1.00		1.00	:	1.00	
	Too sandy Slope	1.00	Slope	1.00	Seepage   Slope	1.00	
	Slope	1	 	i	Gravel content	0.02	
	İ	i	İ	į			
371A:		1		ļ			
Croswell	: -		Very limited	1	Very limited		
	Depth to	1.00	: -	1.00	:	1.00	
	saturated zone Seepage	1.00	saturated zone Seepage	1.00	Seepage Depth to	1.00	
	Too sandy	1.00	seepage	1	saturated zone	1	
				i		ì	
380B:		İ					
Cress	Very limited		Very limited		Very limited		
	Seepage	1.00	Seepage	1.00		1.00	
	Too sandy	1.00	 		Seepage	1.00	
	 		 		Gravel content	0.02	
Rosholt	  Very limited	İ	  Very limited	İ	  Very limited	i	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00	
	Too sandy	1.00			Seepage	1.00	
		1		ļ	Gravel content	0.02	
380C:	 		 		 		
Cress	  Very limited		  Very limited		  Very limited		
	Seepage	1.00	Seepage	1.00		1.00	
	Too sandy	1.00	Slope	0.04	Seepage	1.00	
	Slope	0.04			Slope	0.04	
					Gravel content	0.02	
Rosholt	  Very limited		  Very limited		  Very limited		
MODITOT C	Seepage	1.00	Seepage	1.00		1.00	
	Too sandy	1.00	Slope	0.04		1.00	
	Slope	0.04			Slope	0.04	
				i	Gravel content	0.02	
	i	i	i	i	i	i	

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
380D: Cress	  Very limited   Seepage   Too sandy   Slope	    1.00  1.00  1.00	  Very limited   Seepage   Slope 	    1.00  1.00	  Very limited   Too sandy   Seepage   Slope   Gravel content	    1.00  1.00  1.00  0.02
Rosholt	   Very limited   Seepage   Too sandy   Slope	  1.00  1.00  1.00	  Very limited   Seepage   Slope   	  1.00  1.00   	   Very limited   Too sandy   Seepage   Slope   Gravel content	  1.00  1.00  1.00  0.02
383B: Mahtomedi	  Very limited   Seepage   Too sandy	  1.00  1.00 	  Very limited   Seepage 	    1.00   	  Very limited   Too sandy   Seepage   Gravel content	  1.00  1.00  0.01
383C: Mahtomedi	  Very limited   Seepage   Too sandy   Slope	  1.00  1.00  0.04	  Very limited   Seepage   Slope 	  1.00  0.04 	  Very limited   Too sandy   Seepage   Slope   Gravel content	  1.00  1.00  0.04  0.01
383D: Mahtomedi	  Very limited   Seepage   Too sandy   Slope	    1.00  1.00  1.00	  Very limited   Seepage   Slope 	    1.00  1.00	   Very limited   Too sandy   Seepage   Slope   Gravel content	  1.00  1.00  1.00  0.01
396B: Friendship	  Very limited   Depth to   saturated zone   Seepage   Too sandy	    1.00    1.00	  Very limited   Depth to   saturated zone   Seepage	    1.00    1.00	  Very limited   Too sandy   Seepage 	    1.00  1.00 
Wurtsmith	Very limited   Depth to   saturated zone   Seepage   Too sandy	  1.00    1.00  1.00	Very limited   Depth to   saturated zone   Seepage	  1.00    1.00	Very limited Too sandy Seepage Depth to saturated zone	  1.00  1.00  0.86
Grayling	  Very limited   Seepage   Too sandy 	  1.00  1.00	  Very limited   Seepage   	1.00	  Very limited   Too sandy   Seepage	  1.00  1.00
397A: Perchlake	   Very limited   Depth to   saturated zone   Seepage   Too sandy	  1.00    1.00  0.50	  Very limited   Depth to   saturated zone   Seepage	  1.00    1.00 	   Very limited   Depth to   saturated zone   Seepage   Too sandy	  1.00    1.00  0.50
399B: Grayling	  Very limited   Seepage   Too sandy	  1.00  1.00	  Very limited   Seepage 	    1.00 	  Very limited   Too sandy   Seepage	  1.00  1.00

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary     landfill		Area sanitary   landfill		Daily cover for landfill	
	Rating class and	Value	Rating class and	Value	Rating class and	Valu
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
399C:	 	l I	 		 	
	  Very limited		  Very limited	i	  Very limited	i
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.04	Seepage	1.00
	Slope	0.04		ļ	Slope	0.04
399D:	 		 	 	 	
Grayling	  Very limited	İ	  Very limited	i	  Very limited	i
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
405A:	 	l I	 		 	
Lupton	  Very limited		  Very limited		  Very limited	i
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of	1.00	Seepage	1.00	Content of	1.00
	organic matter		Ponding	1.00	organic matter	
	Seepage	1.00			Ponding	1.00
	Ponding	1.00	 		Seepage	0.16
Cathro	  Very limited	İ	  Very limited	İ	  Very limited	i
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Ponding	1.00	Seepage	1.00	Ponding	1.00
			Ponding	1.00	ĺ	
Tawas	  Very limited		  Very limited		  Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	ĺ	saturated zone	Ì
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Ponding	1.00	Seepage	1.00
	Ponding	1.00	 		Ponding	1.00
406A:			 		 	
Loxley	Very limited	j	Very limited	į	Very limited	j
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of	1.00	Seepage	1.00	Content of	1.00
	organic matter Seepage	1.00	Ponding	1.00	organic matter Ponding	1.00
	Ponding	1.00	 	İ	Seepage	0.16
	İ	j	İ	į		į
407A:					 	
Seelyeville	Depth to	1.00	Very limited   Depth to	1.00	Very limited   Depth to	1.00
	saturated zone	1	saturated zone	1	saturated zone	1
	Content of	1.00	Seepage	1.00	Content of	1.00
	organic matter	İ	Ponding	1.00		1
	Seepage	1.00	_	į	Ponding	1.00
	Ponding	1.00			Seepage	0.16
Markey	  Very limited		  Very limited	 	  Very limited	1
·	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	ĺ	saturated zone	1
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Ponding	1.00	Seepage	1.00
	Ponding	1.00	I	1	Ponding	1.00

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover fo	or
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
410A:			 		 	
Seelyeville	Very limited   Depth to   saturated zone	1.00	  Very limited   Depth to   saturated zone	1.00	  Very limited   Depth to   saturated zone	1.00
	Content of   organic matter   Seepage	1.00	Seepage   Ponding	1.00	Content of	  1.00    1.00
	Ponding	1.00			Seepage	0.16
Cathro	  Very limited		  Very limited		  Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	saturated zone	1.00
	Ponding 	1.00	Seepage   Ponding	1.00	Ponding   	1.00
412A: Rifle	    Verv limited	   	    Very limited	   	    Very limited	
	Depth to   saturated zone	1.00	! <del>-</del>	1.00	<u>-</u>	1.00
	Seepage   Content of	1.00	Seepage Ponding	1.00	!	1.00
	organic matter Ponding	1.00			Ponding   Seepage	1.00
Tacoosh	  Very limited   Depth to	1.00	  Very limited   Depth to	1.00	  Very limited   Depth to	1.00
	saturated zone	İ	saturated zone	į	saturated zone	İ
	Content of   organic matter   Ponding	1.00    1.00	Seepage   Ponding	1.00	!	1.00    1.00
			   	   	Seepage 	0.21
415A:	177 1444	į	 		 	
Greenwood	Depth to	1.00	Very limited   Depth to	1.00	Very limited   Depth to   saturated zone	1.00
	saturated zone   Content of   organic matter	1.00	saturated zone Seepage Ponding	1.00	Content of	1.00
	Seepage   Ponding	1.00	Ionarng		Ponding Seepage	1.00
439B:			 			
Graycalm	_	1 00	Very limited	1 00	Very limited	1 00
	Seepage   Too sandy	1.00	Seepage   	1.00	Too sandy   Seepage	1.00
Menahga	  Very limited   Seepage	1.00	  Very limited   Seepage	1.00	  Very limited   Too sandy	1.00
	Too sandy	1.00	Beepage   		Seepage	1.00
439C:		į		į		į
Graycalm	Very limited   Seepage	1.00	Very limited   Seepage	1.00	Very limited   Too sandy	1.00
	Too sandy	1.00	Slope	0.04	Seepage	1.00
	Slope	0.04	 		Slope	0.04
Menahga	-	1 00	Very limited	1 00	Very limited	1 00
	Seepage   Too sandy	1.00	Seepage   Slope	1.00	Too sandy Seepage	1.00
	Slope	0.04	;		Slope	0.04

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover fo	or
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
						<del> </del>
439D: Graycalm	  Very limited   Seepage	    1.00	  Very limited   Seepage	    1.00	  Very limited   Too sandy	    1.00
	Too sandy	1.00	Slope	1.00	· -	1.00
Menahga	  Very limited   Seepage	    1.00	  Very limited   Seepage	    1.00	  Very limited   Too sandy	1.00
	Too sandy   Slope	1.00	Slope 	1.00	Seepage   Slope	1.00
441C:						
Freeon	Very limited   Depth to   saturated zone	1.00	Very limited   Depth to   saturated zone	1.00	Very limited   Depth to   saturated zone	1.00
	Slope	0.37	Slope	0.37	Slope	0.37
Cathro	  Very limited   Depth to	    1.00	  Very limited   Depth to	    1.00	  Very limited   Depth to	    1.00
		  1.00 	saturated zone Seepage Ponding	  1.00  1.00	saturated zone Ponding	1.00
442C:				 		
Haugen	Very limited   Depth to   saturated zone	0.99	Somewhat limited   Depth to   saturated zone	  0.75 	Somewhat limited   Depth to   saturated zone   Gravel content	0.86
	 				Graver content	
Greenwood	Very limited   Depth to   saturated zone	1.00	Very limited   Depth to   saturated zone	  1.00 	Very limited   Depth to   saturated zone	1.00
	Content of   organic matter	1.00	Seepage   Ponding	1.00	organic matter	1.00
	Seepage   Ponding 	1.00  1.00 	 	   	Ponding   Seepage 	1.00
443D: Amery	    Very limited	į	    Very limited	į	    Very limited	į
AMELY	Slope	1.00	Slope	1.00	Slope   Gravel content	1.00
Greenwood	Depth to	1.00	  Very limited   Depth to	1.00	  Very limited   Depth to	1.00
	saturated zone Content of organic matter	1.00	saturated zone Seepage Ponding	  1.00  1.00	saturated zone Content of organic matter	1.00
	Seepage   Ponding	1.00			Ponding   Seepage	1.00
461A:	 		 		 	
	  Very limited		  Very limited		  Very limited	
	Flooding   Depth to   saturated zone	1.00  1.00 	Flooding   Depth to   saturated zone	1.00  1.00 	Depth to   saturated zone   Content of	1.00    1.00
	Content of   organic matter	1.00	Seepage   Ponding	1.00	organic matter	1.00
	Seepage   Ponding	1.00			Seepage	0.16

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	Y	Area sanitary		Daily cover fo	or
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		1				<u> </u>
484A:   Greenwood      	  Very limited   Depth to	1.00	  Very limited   Depth to	    1.00	  Very limited   Depth to	    1.00
	saturated zone   Content of   organic matter	1.00	saturated zone Seepage Ponding	  1.00  1.00	saturated zone Content of organic matter	1.00
	Seepage   Ponding 	1.00  1.00 	   	   	Ponding   Seepage 	1.00  0.22 
Beseman	Very limited   Depth to   saturated zone	  1.00 	Very limited   Depth to   saturated zone	  1.00 	Very limited   Depth to   saturated zone	  1.00 
	Content of   organic matter   Ponding	1.00    1.00	Seepage   Ponding 	1.00  1.00 	Content of organic matter Ponding Seepage	1.00    1.00  0.22
495B:	 		  -		  -	
Karlsborg	Very limited   Depth to   saturated zone   Seepage   Too sandy	  1.00    1.00  1.00	Very limited   Seepage   Depth to   saturated zone	  1.00  0.99   	Very limited  Too sandy Seepage  Too clayey Depth to saturated zone	  1.00  1.00  1.00  0.99
Grettum	Very limited   Depth to   saturated zone   Seepage	  1.00    1.00	   Very limited   Depth to   saturated zone   Seepage	  1.00    1.00	  Very limited   Too sandy   Seepage	  1.00  1.00
Perida	Too sandy    Very limited   Seepage   Too sandy   Depth to   saturated zone	1.00      1.00  1.00  0.09	  Very limited   Seepage   	    1.00   	  Very limited   Too sandy   Seepage 	    1.00  1.00
495C:	 				 	
Karlsborg	Very limited   Depth to   saturated zone   Seepage   Too sandy   Slope	  1.00    1.00  1.00  0.04	Very limited   Seepage   Depth to   saturated zone   Slope	  1.00  0.99    0.04	Very limited Too sandy Seepage Too clayey Depth to saturated zone Slope	  1.00  1.00  1.00  0.99 
Grettum	  Very limited   Depth to   saturated zone   Seepage   Too sandy	  1.00    1.00	  Very limited   Depth to   saturated zone   Seepage   Slope	  1.00    1.00  0.04	  Very limited   Too sandy   Seepage   Slope	  1.00  1.00  0.04
Perida	Slope    Very limited   Seepage	0.04	    Very limited   Seepage	      1.00	    Very limited   Too sandy	      1.00
	Too sandy Depth to saturated zone	1.00  0.09	Slope 	0.04	Seepage   Slope 	1.00  0.04 
	Slope	0.04	[ 		 	1

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary     landfill		Area sanitary		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and	Value	Rating class and limiting features	Value
40FD	İ	İ		İ		İ
495D: Karlsborg	  Verv limited		  Very limited		  Very limited	
<b>.</b>	Depth to	1.00	Seepage	1.00	Too sandy	1.00
	saturated zone	į	Slope	1.00	Seepage	1.00
	Seepage	1.00	Depth to	0.99	Too clayey	1.00
	Too sandy	1.00	saturated zone	ļ	Slope	1.00
	Slope 	1.00 	 		Depth to saturated zone	0.99
Grand haven					 	
Grettum	Depth to	1.00	Very limited   Depth to	1.00	Very limited   Too sandy	1.00
	saturated zone	1	saturated zone	1	Slope	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00	Slope	1.00		
	Slope	1.00	 	į		į
Perida	  Very limited		  Very limited		  Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
	Depth to	0.09				
	saturated zone					
497A:		į		į		į
Meenon			Very limited	!	Very limited	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
515A:	 		 	 		
Manitowish	Very limited	i	  Very limited	İ	Very limited	i
	Depth to	1.00	Depth to	1.00	Too sandy	1.00
	saturated zone		saturated zone		Seepage	1.00
	Seepage	1.00	Seepage	1.00	Depth to	0.47
	Too sandy	1.00			saturated zone	0.04
	 		 	 	Gravel content	0.04
521A:				İ		
Dody	Very limited		Very limited	:	Very limited	1 00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	!	1.00	Seepage	1.00		1.00
	Too clayey	1.00	Ponding	1.00	Hard to compact	1.00
	Ponding	1.00		į	Ponding	1.00
524E:			[ 		 	[
Rock outcrop	Not rated	į	Not rated	į	Not rated	į
Frogcreek	  Very limited		  Very limited		  Very limited	[
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
Metonga	  Very limited		  Very limited		  Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1	Slope	1.00
	1	1	Seepage	1.00		1

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover fo	or
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
542B: Haugen, very stony	 		    Somewhat limited		    Somewhat limited	
naugen, very stony	Depth to   saturated zone	0.99	!	0.75	!	0.86
Haugen	Very limited Depth to saturated zone	  0.99 	  Somewhat limited   Depth to   saturated zone	    0.75   		  0.86    0.01
542C: Haugen, very stony	  Very limited   Depth to   saturated zone   Slope	  0.99    0.04	  Somewhat limited   Depth to   saturated zone   Slope	    0.75    0.04	  Somewhat limited   Depth to   saturated zone   Slope   Gravel content	  0.86    0.04  0.01
Haugen	  Very limited   Depth to   saturated zone   Slope	  0.99    0.04	  Somewhat limited   Depth to   saturated zone   Slope	    0.75    0.04	Somewhat limited   Depth to   saturated zone   Slope   Gravel content	  0.86    0.04  0.01
543B: Anigon	  Very limited   Seepage   Too sandy	1.00	  Very limited   Seepage 	      1.00	  Very limited   Too sandy   Seepage	    1.00  1.00
543C2: Anigon	  Very limited   Seepage   Too sandy   Slope	  1.00  1.00  0.04	  Very limited   Seepage   Slope	    1.00  0.04		  1.00  1.00  0.04
544F: Menahga	  Very limited   Slope   Seepage   Too sandy	  1.00  1.00  1.00	  Very limited   Slope   Seepage	    1.00  1.00	  Very limited   Slope   Too sandy   Seepage	  1.00  1.00  1.00
Mahtomedi	   Very limited   Slope   Seepage   Too sandy	  1.00  1.00  1.00	  Very limited   Slope   Seepage 	  1.00  1.00 	Very limited   Slope   Too sandy   Seepage   Gravel content	  1.00  1.00  1.00  0.01
555A: Fordum	  Very limited   Flooding   Depth to   saturated zone   Seepage   Too sandy   Ponding	  1.00  1.00    1.00  1.00	  Very limited   Flooding   Depth to   saturated zone   Seepage   Ponding	    1.00  1.00    1.00  1.00	  Very limited   Depth to   saturated zone   Too sandy   Seepage   Ponding	  1.00    1.00  1.00
574B: Sayner	  Very limited   Seepage   Too sandy 	    1.00  1.00	  Very limited   Seepage   	    1.00   	  Very limited   Too sandy   Seepage   Gravel content	    1.00  1.00  0.08

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary   landfill		Area sanitary		Daily cover fo	r
	Rating class and   limiting features	Value	Rating class and   limiting features		Rating class and limiting features	
574C: Sayner	    Very limited   Seepage	      1.00	    Very limited   Seepage	      1.00	    Very limited   Too sandy	      1.00
	Too sandy Slope	1.00	Slope	0.37		1.00  0.37  0.08
574E:	 		 		 	1
Sayner	Very limited   Slope   Seepage   Too sandy	  1.00  1.00  1.00	Very limited   Slope   Seepage 	  1.00  1.00 	-	  1.00  1.00  1.00  0.08
579B: Parkfalls	    Very limited   Depth to	      1.00	    Very limited   Depth to	      1.00	    Very limited   Depth to	      1.00
	saturated zone		saturated zone		saturated zone	
600A:	 		 		 	1
Haplosaprists	Not rated 	     	Very limited Ponding Depth to saturated zone	  1.00  1.00	Not rated     	     
Psammaquents	  Not rated   	     	   Very limited   Ponding   Depth to   saturated zone	  1.00  1.00	  Not rated   	       
615B:	 		 		 	
Cress	Very limited   Seepage   Too sandy	  1.00  1.00	Very limited   Seepage 	1.00	Very limited   Too sandy   Seepage   Gravel content	  1.00  1.00  0.02
615C:	 		 		 	1
Cress	Very limited   Seepage   Too sandy   Slope 	  1.00  1.00  0.04 	Very limited   Seepage   Slope 	  1.00  0.04 	· -	  1.00  1.00  0.04  0.02
615D:	İ	İ	İ	İ	İ	İ
Cress	Very limited   Seepage   Too sandy   Slope 	  1.00  1.00  1.00	Very limited   Seepage   Slope 	  1.00  1.00 	Very limited   Too sandy   Seepage   Slope   Gravel content	  1.00  1.00  1.00  0.02
623A:						
Capitola	Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	Very limited Depth to saturated zone Ponding	  1.00    1.00	Very limited   Depth to   saturated zone   Ponding	  1.00    1.00

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary     landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
624A:	 		 		 	
Ossmer	  Very limited	i	  Very limited	i	  Very limited	i
	Depth to	1.00	! <del>-</del>	1.00	: -	1.00
	saturated zone	į	saturated zone	į	saturated zone	į
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	 		Seepage	1.00
632A:						i
Aftad		:	Very limited	!	Somewhat limited	
	Depth to	1.00	· -	1.00		0.86
	saturated zone		saturated zone		saturated zone	
632B:	<u> </u>	į		į	<u> </u>	į
Aftad		:	Very limited	:	Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
632C:						
Aftad	  Very limited	l I	  Very limited	l I	  Somewhat limited	1
Arcad	Depth to	1.00		1.00		0.86
	saturated zone		saturated zone		saturated zone	
	Slope	0.04	!	0.04		0.04
633F:					 	
Pence	Very limited	i	  Very limited	i	  Very limited	i
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
			 		Gravel content	0.16
Padus	  Very limited		  Very limited		  Very limited	
	Slope	1.00	Slope	1.00	-	1.00
	Seepage	1.00	Seepage	1.00	•	1.00
	Too sandy	1.00			Seepage 	1.00
648B:	<u> </u>	į		į		į
Sconsin		1.00	Very limited	!	Very limited	0.99
	Depth to saturated zone	1	Seepage Depth to	1.00	Depth to saturated zone	0.33
	Seepage	1.00	saturated zone			
670C:			 		 	
Keweenaw	  Very limited	İ	  Very limited	İ	Somewhat limited	i
	Seepage	1.00	Seepage	1.00	Too sandy	0.50
	Too sandy	0.50	Slope	0.37	Slope	0.37
	Slope	0.37			Seepage	0.22
Pence	  Very limited		  Very limited		  Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.37		1.00
	Slope	0.37	 		Slope   Gravel content	0.37
670E: Keweenaw	  Very limited		  Very limited		  Very limited	
TOMOGITAM	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Siope   Seepage	1.00	Too sandy	0.50
	Too sandy	0.50			Seepage	0.22
	i -	i	i İ	i	i	i

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	Ϋ́	Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
670E: Pence	  Very limited   Slope   Seepage   Too sandy	    1.00  1.00  1.00	  Very limited   Slope   Seepage 	    1.00  1.00 	  Very limited   Slope   Too sandy   Seepage   Gravel content	    1.00  1.00  1.00  0.16
671B: Spoonerhill, stony	  Very limited   Depth to   saturated zone   Too sandy	0.99	  Somewhat limited   Depth to   saturated zone	    0.75   	Somewhat limited   Depth to   saturated zone   Too sandy	0.86
Spoonerhill	Very limited   Depth to   saturated zone   Too sandy	0.99	Somewhat limited   Depth to   saturated zone	  0.75   	Somewhat limited Depth to saturated zone Too sandy	0.86
680B: Stanberry, stony	Very limited Depth to saturated zone Too sandy	  0.99    0.50	  Somewhat limited   Depth to   saturated zone	    0.75   	Somewhat limited   Depth to   saturated zone   Too sandy	0.86
Pence, stony	  Very limited   Seepage   Too sandy 	  1.00  1.00	  Very limited   Seepage 	 	   Very limited   Too sandy   Seepage   Gravel content	  1.00  1.00  0.16
683A: Tipler	  Very limited   Depth to   saturated zone   Seepage   Too sandy	  1.00    1.00  1.00	  Very limited   Depth to   saturated zone   Seepage	    1.00    1.00	Seepage	  1.00  1.00  0.47    0.02
706A: Winterfield	   Very limited   Flooding   Depth to   saturated zone   Seepage   Too sandy	    1.00  1.00    1.00	   Very limited   Flooding   Depth to   saturated zone   Seepage	    1.00  1.00    1.00	Very limited   Depth to   saturated zone   Too sandy   Seepage	    1.00    1.00  1.00
Totagatic	  Very limited   Flooding   Depth to   saturated zone   Seepage   Too sandy   Ponding	  1.00  1.00    1.00  1.00	  Very limited   Flooding   Depth to   saturated zone   Seepage   Ponding	  1.00  1.00    1.00  1.00	saturated zone Too sandy	  1.00    1.00  1.00  1.00
724A: Rib	  Very limited   Depth to   saturated zone   Seepage   Too sandy   Ponding	  1.00    1.00  1.00	  Very limited   Depth to   saturated zone   Seepage   Ponding	    1.00    1.00  1.00	saturated zone Too sandy	    1.00    1.00  1.00

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary		Area sanitary		Daily cover for	
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
724A: Rock outcrop	    Not rated 	     	    Not rated 	     	    Not rated 	     
726B: Sissabagama	  Very limited   Depth to   saturated zone	    1.00   	  Very limited   Depth to   saturated zone   Seepage	    1.00    1.00	  Somewhat limited   Depth to   saturated zone	    0.47   
733A: Wozny	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	   Very limited   Depth to   saturated zone   Ponding	    1.00    1.00
771A: Lenroot	   Very limited   Depth to   saturated zone   Seepage   Too sandy	  1.00    1.00  1.00	   Very limited   Depth to   saturated zone   Seepage 	    1.00    1.00 	Very limited Too sandy Seepage Depth to saturated zone Gravel content	  1.00  1.00  0.86    0.05
827A: Scoba	  Very limited   Depth to   saturated zone   Seepage   Too sandy	  1.00    1.00  1.00	   Very limited   Depth to   saturated zone   Seepage	  1.00    1.00 	Very limited Too sandy Seepage Depth to saturated zone Gravel content	  1.00  1.00  0.86    0.03
853C: Frogcreek	  Very limited   Depth to   saturated zone	      1.00 	  Very limited   Depth to   saturated zone	      1.00 	  Very limited   Depth to   saturated zone	      1.00
Stinnett	  Very limited   Depth to   saturated zone	  1.00 	   Very limited   Depth to   saturated zone	  1.00 	   Very limited   Depth to   saturated zone	1.00
Wozny	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	saturated zone	  1.00    1.00
856B: Stinnett	  Very limited   Depth to   saturated zone	      1.00 	  Very limited   Depth to   saturated zone	      1.00 	  Very limited   Depth to   saturated zone	      1.00
857B: Frogcreek	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00 
857C: Frogcreek	  Very limited   Depth to   saturated zone   Slope	  1.00    0.16	  Very limited   Depth to   saturated zone   Slope	  1.00    0.16	  Very limited   Depth to   saturated zone   Slope	  1.00    0.16

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name			Area sanitary		Daily cover for	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
873B: Stanberry	  Very limited   Depth to   saturated zone   Too sandy	    0.99    0.50	  Somewhat limited   Depth to   saturated zone	      0.75   	  Somewhat limited   Depth to   saturated zone   Too sandy	    0.86    0.50
873C: Stanberry	  Very limited   Depth to   saturated zone   Too sandy   Slope	0.99	  Somewhat limited   Depth to   saturated zone   Slope	    0.75    0.37	  Somewhat limited   Depth to   saturated zone   Too sandy   Slope	0.86
873D: Stanberry	  Very limited   Slope   Depth to   saturated zone   Too sandy	  1.00  0.99    0.50	  Very limited   Slope   Depth to   saturated zone	    1.00  0.75   	  Very limited   Slope   Depth to   saturated zone   Too sandy	  1.00  0.86    0.50
905A: Cublake	  Very limited   Depth to   saturated zone   Too sandy 	  1.00    0.50	   Very limited   Depth to   saturated zone   Seepage 	  1.00    1.00	  Very limited   Seepage   Too sandy   Depth to   saturated zone	  1.00  0.50  0.47
926A: Flink	  Very limited   Depth to   saturated zone	1.00	  Very limited   Depth to   saturated zone   Seepage	    1.00    1.00	  Very limited   Depth to   saturated zone	1.00
943D: Stanberry	  Very limited   Slope   Depth to   saturated zone   Too sandy	  1.00  0.99    0.50	  Very limited   Slope   Depth to   saturated zone	    1.00  0.75 	  Very limited   Slope   Depth to   saturated zone   Too sandy	  1.00  0.86 
Greenwood	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00 	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00 
948A: Billyboy	  Very limited   Depth to   saturated zone   Seepage   Too sandy	  1.00    1.00  1.00	  Very limited   Depth to   saturated zone   Seepage 	    1.00    1.00	  Very limited   Too sandy   Seepage   Depth to   saturated zone	  1.00  1.00  0.99
970C: Keweenaw	  Very limited   Seepage   Too sandy   Slope	  1.00  0.50  0.37	  Very limited   Seepage   Slope 	    1.00  0.37 	  Somewhat limited   Too sandy   Slope   Seepage	0.50

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary		Area sanitary		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		i i		İ		i i
970C:			 			
Pence	Very limited   Seepage	1.00	Very limited   Seepage	1.00	Very limited   Too sandy	1.00
	Too sandy	1.00	Slope	0.37	Seepage	1.00
	Slope	0.37	blope		Slope	0.37
				į	Gravel content	0.16
Greenwood	  Very limited		  Very limited		  Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of	1.00	Seepage	1.00	Content of	1.00
	organic matter		Ponding	1.00	organic matter	
	Seepage	1.00			Ponding	1.00
	Ponding	1.00	 		Seepage	0.22
970E:		į		į		į
Keweenaw	· -		Very limited	'	Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	0.50
	Too sandy	0.50	 		Seepage 	0.22
Pence	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
	 		 		Gravel content	0.16
Greenwood	  Very limited		  Very limited		  Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	!
	Content of	1.00	Seepage	1.00	Content of	1.00
	organic matter		Ponding	1.00	organic matter	
	Seepage	1.00			Ponding	1.00
	Ponding 	1.00	 		Seepage 	0.22
1070C: Fremstadt	  Vorus limited		  Very limited		  Very limited	
FI ems taut	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	0.50	Slope	0.16	Too sandy	0.50
	Slope	0.16			Slope	0.16
<b>G</b> arage	 	į		į		į
Cress	1 _7	1 00	Very limited		Very limited	1.00
	Seepage   Too sandy	1.00	Seepage   Slope	0.04		1.00
	Slope	0.04	probe	0.01	Slope	0.04
	blope				Gravel content	0.02
1070D:			 		 	
Fremstadt	  Verv limited		  Very limited		  Very limited	
	Slope	1.00		1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	0.50	 	į	Too sandy	0.50
Cress	  Very limited		  Very limited		  Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
	1	İ	I .	İ	Gravel content	0.02

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover for	
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
1080B: Spoonerhill	  Very limited   Depth to   saturated zone   Too sandy	    0.99    0.50	  Somewhat limited   Depth to   saturated zone	      0.75 	  Somewhat limited   Depth to   saturated zone   Too sandy	0.86
Spoonerhill, stony	  Very limited   Depth to   saturated zone   Too sandy	    0.99    0.50	   Somewhat limited   Depth to   saturated zone	    0.75   	Somewhat limited   Depth to   saturated zone   Too sandy	0.86
Cress	  Very limited   Seepage   Too sandy 	  1.00  1.00 	  Very limited   Seepage   	    1.00   	   Very limited   Too sandy   Seepage   Gravel content	  1.00  1.00  0.02
1653C: Stanberry	  Very limited   Depth to   saturated zone   Too sandy   Slope	  0.99    0.50  0.04	Somewhat limited   Depth to   saturated zone   Slope	  0.75    0.04	  Somewhat limited   Depth to   saturated zone   Too sandy   Slope	0.86
Parkfalls	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	1.00
Wozny	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	1.00
2015: Pits	    Not rated 	     	    Not rated 	     	    Not rated 	     
2050: Landfill	  Not rated 	   	  Not rated 	   	  Not rated 	
3011A: Barronett	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	   Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00
3125A: Meehan	  Very limited   Depth to   saturated zone   Seepage   Too sandy	  1.00    1.00  1.00	   Depth to   saturated zone   Seepage	  1.00    1.00	  Very limited   Depth to   saturated zone   Too sandy   Seepage	  1.00    1.00  1.00
3126A: Wurtsmith	  Very limited   Depth to   saturated zone   Seepage   Too sandy	    1.00    1.00  1.00	   Very limited   Depth to   saturated zone   Seepage 	    1.00    1.00	  Very limited   Too sandy   Seepage   Depth to   saturated zone	  1.00  1.00  0.86

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary		Area sanitary   landfill		Daily cover for	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
3276A: Au Gres	   Very limited   Depth to   saturated zone   Seepage   Too sandy	    1.00    1.00  1.00	   Very limited   Depth to   saturated zone   Seepage	    1.00    1.00	  Very limited   Depth to   saturated zone   Too sandy   Seepage	    1.00    1.00  1.00
3312B: Glendenning, very stony	  Very limited   Depth to   saturated zone	        1.00	  Very limited   Depth to   saturated zone	        1.00	 	
Glendenning	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Depth to   saturated zone	1.00	  Very limited   Depth to   saturated zone	1.00
3336A: Fenander	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	  Very limited   Depth to   saturated zone   Ponding	1.00
3403A: Loxley	Very limited   Depth to   saturated zone   Content of   organic matter   Seepage   Ponding	  1.00    1.00    1.00	   Very limited   Depth to   saturated zone   Seepage   Ponding	  1.00    1.00  1.00	saturated zone	  1.00    1.00    1.00  0.16
Beseman	Very limited   Depth to   saturated zone   Content of   organic matter   Ponding	  1.00    1.00    1.00	   Depth to   saturated zone   Seepage   Ponding	  1.00    1.00  1.00	saturated zone	  1.00    1.00    1.00  0.22
Dawson	Very limited   Depth to   saturated zone   Seepage   Content of   organic matter   Ponding	  1.00    1.00  1.00 	  Very limited   Depth to   saturated zone   Seepage   Ponding	  1.00    1.00  1.00	saturated zone Content of	  1.00    1.00    1.00  0.16
3424C: Frogcreek	  Very limited   Depth to   saturated zone	      1.00 	  Very limited   Depth to   saturated zone	      1.00	  Very limited   Depth to   saturated zone	    1.00
Magroc	  Very limited   Depth to   saturated zone   Depth to bedrock   Too sandy	1.00	  Very limited   Depth to   saturated zone   Depth to bedrock	  1.00    0.42	  Very limited   Depth to   saturated zone   Too sandy   Depth to bedrock	1.00

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary		Area sanitary		Daily cover for landfill	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
	limiting features	1	IIMICING Teacures	1	IIMICING Teacures	+
3424C:	 	i	 	l I	 	1
Stinnett	  Very limited	i	  Very limited	İ	  Very limited	i
	Depth to	1.00	: -	1.00	Depth to	1.00
	saturated zone	į	saturated zone	į	saturated zone	į
Rock outcrop	  Not rated		  Not rated		  Not rated	
3446A:	 		 		 	1
Newson	  Verv limited	i	  Very limited		  Very limited	i
	Depth to	1.00	: -	1.00	: -	1.00
	saturated zone	i	saturated zone	İ	saturated zone	i
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Ponding	1.00	Seepage	1.00
	Ponding	1.00			Ponding	1.00
3448B:	 		 		 	
Grettum	Very limited	į	Very limited	İ	Very limited	į
	Depth to	1.00	Depth to	1.00	Too sandy	1.00
	saturated zone		saturated zone		Seepage	1.00
	Seepage	1.00	Seepage	1.00		
	Too sandy	1.00	l	l I	l	
3448C:	 		 		 	
Grettum	Very limited	İ	Very limited	ĺ	Very limited	İ
	Depth to	1.00	Depth to	1.00	Too sandy	1.00
	saturated zone		saturated zone		Seepage	1.00
	Seepage	1.00	Seepage	1.00	Slope	0.04
	Too sandy	1.00	Slope	0.04		1
	Slope	0.04	l I	l I	l	
3516A:	 		 		 	
Slimlake	Very limited	İ	Very limited	İ	Very limited	İ
	Depth to	1.00	Depth to	1.00	Too sandy	1.00
	saturated zone		saturated zone		Seepage	1.00
	Seepage	1.00	Seepage	1.00	Depth to	0.47
	Too sandy	1.00	l	l I	saturated zone	
3629B:						
Perida	Very limited		Very limited		Very limited	1
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
	Depth to	0.09				
	saturated zone		 		 	
M-W:						İ
Miscellaneous water	Not rated		Not rated		Not rated	1
W:	 		 	 	 	
Water	Not rated	i	  Not rated	i	  Not rated	i
	i	i	İ	i	İ	i

## Table 20a. -- Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The ratings given for the thickest layer are for the thickest layer above and excluding the bottom layer. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	   Potential as sou:   of gravel	rce	Potential as source of sand		
	Rating class	Value	Rating class	Value	
3A: Totagatic	Bottom layer	      0.00  0.00		    0.44  0.64	
Bowstring	Bottom layer	  0.00  0.00		  0.00  0.00	
Ausable	Bottom layer	0.00		  0.00  0.58	
22A: Comstock		0.00	  Poor   Bottom layer   Thickest layer	    0.00  0.00	
24A: Poskin	Thickest layer	0.00		0.00	
27A: Scott Lake	Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	    0.02  0.50	
28B:	 	 	 	 	
Haugen, very stony	Bottom layer	1	Fair   Bottom layer   Thickest layer	  0.02  0.04	
Haugen	Bottom layer	  0.00  0.00 	· -	  0.02  0.04 	
Rosholt, very stony	Thickest layer	  0.00  0.16 		  0.02  0.50 	
Rosholt	Thickest layer	  0.00  0.16	•	  0.02  0.50	
28C: Haugen, very stony	Bottom layer	    0.00  0.00	· -	  0.02  0.04	

Table 20a.--Construction Materials--Continued

Map symbol and soil name	   Potential as so   of gravel 	urce	Potential as source		
	Rating class	Value	Rating class	Value	
28C: Haugen	  Poor   Bottom layer   Thickest layer	0.00	    Fair   Bottom layer   Thickest layer	    0.02  0.04	
Rosholt, very stony	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.02	
Rosholt	  Fair   Thickest layer   Bottom layer	0.00	-	0.02	
33B: Chetek	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.03	
33C: Chetek	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.03	
38A: Rosholt	  Fair   Thickest layer   Bottom layer	    0.00  0.16	  Fair   Thickest layer   Bottom layer	0.02	
38B: Rosholt	  Fair   Thickest layer   Bottom layer	  0.00  0.16	  Fair   Thickest layer   Bottom layer	0.02	
38C: Rosholt	  Fair   Thickest layer   Bottom layer	  0.00  0.16	  Fair   Thickest layer   Bottom layer	0.02	
38D: Rosholt	  Fair   Thickest layer   Bottom layer	  0.00  0.16	  Fair   Thickest layer   Bottom layer	0.02	
42D: Amery	  Poor   Thickest layer   Bottom layer	0.00	  Fair   Bottom layer   Thickest layer	0.03	
43B: Antigo	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.00	
43C: Antigo	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.00	
43D: Antigo	  Fair   Thickest layer   Bottom layer 	0.00	  Fair   Thickest layer   Bottom layer	  0.00  0.50	

Table 20a.--Construction Materials--Continued

Map symbol and soil name	   Potential as so   of gravel 	ource	Potential as source of sand		
	Rating class	Value	Rating class	Value	
48A: Brill	    Fair   Thickest layer   Bottom layer	    0.00  0.08	     Fair   Thickest layer   Bottom layer	    0.00  0.50	
63A: Crystal Lake	  Poor   Bottom layer   Thickest layer	0.00	  Poor   Bottom layer   Thickest layer	0.00	
63B: Crystal Lake	  Poor   Bottom layer   Thickest layer 	0.00	  Poor   Bottom layer   Thickest layer	0.00	
63C: Crystal Lake	  Poor   Bottom layer   Thickest layer	0.00	:	0.00	
63E: Crystal Lake	  Poor   Bottom layer   Thickest layer	0.00	  Poor   Bottom layer   Thickest layer	0.00	
64A: Totagatic	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	  0.44  0.64	
Winterfield	  Poor   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.10	
69B: Keweenaw	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Bottom layer   Thickest layer	0.10	
Sayner	  Fair   Thickest layer   Bottom layer 	  0.00  0.08	  Fair   Bottom layer   Thickest layer 	  0.43  0.72	
Vilas	Poor   Bottom layer   Thickest layer	0.00	Fair   Thickest layer   Bottom layer	  0.72  0.86	
69C: Keweenaw	  Poor   Bottom layer   Thickest layer	0.00	:	  0.10  0.11	
Sayner	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Bottom layer   Thickest layer	  0.43  0.72	
Vilas	  Poor   Bottom layer   Thickest layer 	  0.00  0.00	  Fair   Thickest layer   Bottom layer 	  0.72  0.86	

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as so of gravel	ource	Potential as source   of sand		
	Rating class	Value	Rating class	Value	
69E:			 		
Keweenaw	Poor	i	Fair	i	
	Bottom layer	0.00	Bottom layer	0.10	
	Thickest layer	0.00	Thickest layer	0.11	
Sayner	Fair	İ	  Fair		
	Thickest layer	0.00	Bottom layer	0.43	
	Bottom layer	0.08	Thickest layer 	0.72	
Vilas	Poor		Fair		
	Bottom layer	0.00	Thickest layer	0.72	
	Thickest layer	0.00	Bottom layer	0.86	
74B:	į	į		į	
Vilas	Poor		Fair		
	Bottom layer	0.00	Thickest layer	0.72	
	Thickest layer	0.00	Bottom layer 	0.86	
74C:	į I Barara	İ	 	İ	
Vilas	Poor   Bottom layer	0.00	Fair	0.72	
	Thickest layer	0.00	Thickest layer Bottom layer	0.72	
74D: Vilas	Poor	l i	  Fair		
1111	Bottom layer	0.00		0.72	
	Thickest layer	0.00	Bottom layer	0.86	
100B:			 		
Menahga	Poor		Fair		
	Bottom layer	0.00	Thickest layer	0.34	
	Thickest layer	0.00	Bottom layer 	0.64	
100C:	<u> </u>	į		į	
Menahga	Poor	0.00	Fair   Thickest layer	0.34	
	Bottom layer   Thickest layer	0.00	Bottom layer	0.54	
100D: Menahga	Poor	l I	  Fair		
<b>.</b>	Bottom layer	0.00	Thickest layer	0.34	
	Thickest layer	0.00	Bottom layer	0.64	
127D:		l I			
Amery	Poor		Fair		
	Thickest layer	0.00	Bottom layer	0.03	
	Bottom layer	0.00	Thickest layer 	0.03	
Rosholt	1	i	Fair	İ	
	Thickest layer	0.00	Thickest layer	0.02	
	Bottom layer	0.16	Bottom layer 	0.50	
127E:	į_	į		į	
Amery	Poor		Fair		
	Thickest layer   Bottom layer	0.00	Bottom layer Thickest layer	0.03	
	Doccom rayer		 		
Rosholt	Fair	1	Fair		
	Thickest layer	0.00	Thickest layer	0.02	
	Bottom layer	0.16	Bottom layer	0.50	

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as sou of gravel	ırce	   Potential as sou   of sand 	ırce
	Rating class	Value	Rating class	Value
156B: Magnor, very stony	    Poor   Thickest layer   Bottom layer	    0.00  0.00	    Fair   Bottom layer   Thickest layer	      0.00  0.04
Magnor	Poor   Poor   Thickest layer   Bottom layer	į	  Fair   Bottom layer   Thickest layer	    0.00  0.04
157B: Freeon, very stony	  Poor   Bottom layer   Thickest layer	    0.00  0.00	  Fair   Bottom layer   Thickest layer	0.03
Freeon	  Poor   Bottom layer   Thickest layer 	  0.00  0.00	  Fair   Bottom layer   Thickest layer 	  0.03  0.04
157C: Freeon, very stony	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Bottom layer   Thickest layer	  0.03  0.04
Freeon	  Poor   Bottom layer   Thickest layer 	  0.00  0.00	  Fair   Bottom layer   Thickest layer 	  0.03  0.04
160A: Oesterle	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.04
182B: Padus	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.02
182C: Padus	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.02
192A: Worcester	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.04
193A: Minocqua	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.00
215B: Pence	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.03
215C: Pence	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.03

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as source   of gravel		   Potential as sou   of sand	rce
	Rating class	Value	Rating class	Value
215D: Pence	    Fair   Thickest layer   Bottom layer	    0.00  0.08	:	    0.03  0.50
315A: Rib	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.00
337A: Plover	  Poor   Bottom layer   Thickest layer	0.00	:	0.00
368B: Mahtomedi	  Fair   Thickest layer   Bottom layer	0.00	:	0.64
Cress	  Fair   Thickest layer   Bottom layer 		  Fair   Thickest layer   Bottom layer 	  0.08  0.50
368C: Mahtomedi	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Bottom layer   Thickest layer	  0.64  0.64
Cress	  Fair   Thickest layer   Bottom layer	  0.00  0.16	  Fair   Thickest layer   Bottom layer	  0.08  0.50
368D: Mahtomedi	  Fair   Thickest layer   Bottom layer	0.00	:	0.64
Cress	   Thickest layer   Bottom layer	0.00	:	0.08
371A: Croswell	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	0.40
380B: Cress	  Fair   Thickest layer   Bottom layer	0.00		0.08
Rosholt	  Fair   Thickest layer   Bottom layer 	  0.00  0.16	  Fair   Thickest layer   Bottom layer 	  0.02  0.50
380C: Cress	  Fair   Thickest layer   Bottom layer	  0.00  0.16	:	0.08

Table 20a.--Construction Materials--Continued

Map symbol and soil name	   Potential as so   of gravel 	urce	   Potential as sou   of sand 	ırce
	Rating class	Value	Rating class	Value
380C: Rosholt	  Fair   Thickest layer   Bottom layer	    0.00  0.16	  Fair   Thickest layer   Bottom layer	0.02
380D: Cress	  Fair   Thickest layer   Bottom layer	    0.00  0.16	  Fair   Thickest layer   Bottom layer	0.08
Rosholt	  Fair   Thickest layer   Bottom layer 	  0.00  0.16	  Fair   Thickest layer   Bottom layer 	  0.02  0.50
383B: Mahtomedi	  Fair   Thickest layer   Bottom layer	  0.00  0.01	  Fair   Thickest layer   Bottom layer	0.64
383C: Mahtomedi	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Bottom layer   Thickest layer	0.64
383D: Mahtomedi	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Bottom layer   Thickest layer	  0.64  0.64
396B: Friendship	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	    0.69  0.86
Wurtsmith	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	  0.56  0.82
Grayling	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	  0.64  0.64
397A: Perchlake	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	0.44
399B: Grayling	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	0.64
399C: Grayling	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	0.64
399D: Grayling	  Poor   Bottom layer   Thickest layer	    0.00  0.00	  Fair   Thickest layer   Bottom layer 	  0.64  0.64

Table 20a.--Construction Materials--Continued

Map symbol and soil name	   Potential as so   of gravel 	urce	   Potential as sou   of sand 	ırce
	Rating class	Value	Rating class	Value
405A:	 		 	
Lupton	Poor	i	Poor	i
-	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Cathro	  Poor		  Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.03
Tawas	Poor	i	  Fair	i
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer 	0.00	Bottom layer	0.20
406A:				
Loxley	Poor		Poor	
	Bottom layer Thickest layer	0.00	Bottom layer Thickest layer	0.00
	Inickest layer		INICKESC TAYET	
407A:	l Danier			-
Seelyeville	Poor   Bottom layer	0.00	Poor   Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
	_	į	_	į
Markey	Poor   Thickest layer	0.00	Fair   Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.64
		į	_	į
410A: Seelyeville	  Poor	l I	  Poor	l I
	Bottom layer	0.00	!	0.00
	Thickest layer	0.00	Thickest layer	0.00
Cathro	  Poor		  Fair	
	Bottom layer	0.00	-	0.00
	Thickest layer	0.00	Bottom layer	0.03
412A:		İ		İ
Rifle	Poor		Poor	
	Bottom layer Thickest layer	0.00	Bottom layer Thickest layer	0.00
	Inickest layer		Inickest layer	
Tacoosh	Poor		Fair	
	Bottom layer Thickest layer	0.00	Thickest layer Bottom layer	0.00
	Inickest layer		Boccom Tayer	
415A:			  Poor	
Greenwood	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
420D				
439B: Graycalm	  Poor		  Fair	
-	Bottom layer	0.00	Bottom layer	0.18
	Thickest layer	0.00	Thickest layer	0.47
Menahga	  Poor		  Fair	
	1	1		1
	Bottom layer Thickest layer	0.00	Thickest layer Bottom layer	0.34

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as so of gravel	urce	Potential as sou of sand	rce
	Rating class	Value	Rating class	Value
439C: Graycalm	    Poor		    Fair	
	Bottom layer   Thickest layer	0.00	Bottom layer   Thickest layer	0.18
Menahga	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	0.34
439D:	 	l	 	l
Graycalm	Poor   Bottom layer   Thickest layer	0.00	   Fair   Bottom layer   Thickest layer	0.18
Menahga	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	0.34
441C:	 	l	 	l
Freeon	Poor   Bottom layer   Thickest layer	0.00	   Fair   Bottom layer   Thickest layer	0.03
Cathro	  Poor   Bottom layer   Thickest layer	0.00	  Not rated 	
442C:	 			ļ
Haugen	Poor   Bottom layer   Thickest layer	0.00	· -	0.02
Greenwood	  Poor   Bottom layer   Thickest layer	0.00	· -	0.00
443D:	 		 	
Amery	Poor   Thickest layer   Bottom layer	0.00	   Fair   Bottom layer   Thickest layer	0.03
Greenwood	  Poor   Bottom layer   Thickest layer	0.00	  Poor   Bottom layer   Thickest layer	0.00
461A:			 	
Bowstring	Poor   Bottom layer   Thickest layer	0.00	Poor   Bottom layer   Thickest layer	0.00
484A: Greenwood	    Poor   Bottom layer   Thickest layer	    0.00  0.00	    Poor   Bottom layer   Thickest layer	    0.00  0.00
Beseman	  Poor   Bottom layer   Thickest layer	0.00	  Poor   Bottom layer   Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	   Potential as so   of gravel 	urce	   Potential as sou   of sand 	ırce
	Rating class	Value	Rating class	Value
4050		1		-
495B: Karlsborg	Poor	l	  Fair	l I
Maribborg	Bottom layer		Thickest layer	0.00
	Thickest layer	0.00		0.72
		ļ		ļ
Grettum			Fair   Thickest layer	
	Bottom layer   Thickest layer	0.00		0.36
Perida	Poor	ĺ	Fair	ĺ
	Bottom layer	0.00		0.58
	Thickest layer	0.00	Thickest layer	0.72
495C:	 	i	 	i
Karlsborg	Poor	j	Fair	j
	Bottom layer		Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.72
Grettum	Poor		  Fair	
02000	Bottom layer		Thickest layer	0.36
	Thickest layer		Bottom layer	0.58
		ļ		ļ
Perida	Poor	1	Fair	
	Bottom layer   Thickest layer	0.00	Bottom layer Thickest layer	0.58
	Inickest layer	0.00	Inickest layer	0.72
495D:	j	i	İ	i
Karlsborg			Fair	
	Bottom layer		Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.72
Grettum	Poor	i	  Fair	i
	Bottom layer	0.00	Thickest layer	0.36
	Thickest layer	0.00	Bottom layer	0.58
Perida	Poor		  Fair	
reriua	Bottom layer		Bottom layer	0.58
	Thickest layer	0.00	· -	0.72
	!	ļ	!	
497A: Meenon	  Poor		  Fair	
Meenon	Bottom layer	0.00	Thickest layer	0.72
	Thickest layer	0.00		0.72
	İ	ĺ	İ	İ
515A:	 		 	
Manitowish	Fair   Thickest layer	0.00	Fair   Thickest layer	0.03
	Bottom layer	0.08	Bottom layer	0.50
521A:	[	1	[	
Dody			Fair	
	Bottom layer   Thickest layer	0.00	:	0.00
	Inickest layer	0.00	Boccom Tayer	0.13
524E:	į	į	İ	i
Rock outcrop	Not rated	Ţ	Not rated	Ţ
T	   Parasa	-	 	-
Frogcreek	Poor   Thickest layer	0.00	Fair   Thickest layer	0.03
	Bottom layer	0.00	Bottom layer	0.03
	j	į		İ

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as so of gravel	urce	Potential as sou of sand	irce
	Rating class	Value	Rating class	Value
524E: Metonga	   Poor   Thickest layer   Bottom layer	    0.00  0.00	  Fair   Thickest layer   Bottom layer	    0.00  0.04
542B: Haugen, very stony	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Bottom layer   Thickest layer	0.02
Haugen	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Bottom layer   Thickest layer	0.02
542C: Haugen, very stony	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Bottom layer   Thickest layer	0.02
Haugen	  Poor   Bottom layer   Thickest layer 	0.00	  Fair   Bottom layer   Thickest layer	  0.02  0.04
543B: Anigon	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.00
543C2: Anigon	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.00
544F: Menahga	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	    0.34  0.64
Mahtomedi	  Fair   Thickest layer   Bottom layer 	  0.00  0.01	  Fair   Bottom layer   Thickest layer 	  0.64  0.64
555A: Fordum	  Poor   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.00
574B: Sayner	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Bottom layer   Thickest layer	0.43
574C: Sayner	  Fair   Thickest layer   Bottom layer	    0.00  0.08	  Fair   Bottom layer   Thickest layer	0.43
574E: Sayner	  Fair   Thickest layer   Bottom layer	    0.00  0.08	  Fair   Bottom layer   Thickest layer	0.43

Table 20a.--Construction Materials--Continued

Map symbol and soil name	   Potential as sou   of gravel 	rce	   Potential as sou   of sand 	rce
	Rating class	Value	Rating class	Value
579B: Parkfalls	  Poor   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.03
600A: Haplosaprists	    Not rated		    Not rated	
Psammaquents	  Not rated 		  Not rated	
615B: Cress	  Fair   Thickest layer   Bottom layer	  0.00  0.16	  Fair   Thickest layer   Bottom layer	    0.08  0.50
615C: Cress	  Fair   Thickest layer   Bottom layer	    0.00  0.16	  Fair   Thickest layer   Bottom layer	    0.08  0.50
615D: Cress	  Fair   Thickest layer   Bottom layer	  0.00  0.16	  Fair   Thickest layer   Bottom layer	0.08
623A: Capitola	  Poor   Thickest layer   Bottom layer	0.00	:	    0.00  0.04
624A: Ossmer	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	    0.00  0.50
632A: Aftad	  Poor   Bottom layer   Thickest layer	0.00	  Poor   Bottom layer   Thickest layer	0.00
632B: Aftad	  Poor   Bottom layer   Thickest layer	0.00	  Poor   Bottom layer   Thickest layer	0.00
632C: Aftad	  Poor   Bottom layer   Thickest layer	0.00		0.00
633F: Pence	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.03
Padus	  Fair   Thickest layer   Bottom layer 	  0.00  0.08	  Fair   Thickest layer   Bottom layer 	  0.02  0.50

Table 20a.--Construction Materials--Continued

Map symbol and soil name	   Potential as so   of gravel 	urce	   Potential as sou   of sand 	ırce
	Rating class	Value	Rating class	Value
648B: Sconsin	    Fair   Thickest layer   Bottom layer	    0.00  0.25	   Fair   Thickest layer   Bottom layer	    0.00  0.01
670C: Keweenaw	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Bottom layer   Thickest layer	0.10
Pence	  Fair   Thickest layer   Bottom layer 	  0.00  0.08	  Fair   Thickest layer   Bottom layer 	0.03
670E: Keweenaw	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Bottom layer   Thickest layer	0.10
Pence	  Fair   Thickest layer   Bottom layer 	  0.00  0.08	  Fair   Thickest layer   Bottom layer 	0.03
671B: Spoonerhill, stony	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Bottom layer   Thickest layer	  0.11  0.11
Spoonerhill	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Bottom layer   Thickest layer	0.11
680B: Stanberry, stony	  Poor   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.03
Pence, stony	  Fair   Thickest layer   Bottom layer 	0.00	  Fair   Thickest layer   Bottom layer	0.03
683A: Tipler	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.03
706A: Winterfield	  Poor   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.00
Totagatic	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	0.44
724A: Rib	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.00
Rock outcrop	  Not rated 		  Not rated 	   

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as sou   of gravel	irce	Potential as source of sand	
	Rating class	Value	Rating class	Value
726B:	l I	1	 	l I
Sissabagama	Poor	i	Fair	i
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.36
733A:			 	
Wozny	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.09
771A:	İ	İ		i
Lenroot	Poor	1	Fair	
	Bottom layer	0.00	· -	0.00
	Thickest layer	0.00	Thickest layer 	0.54
827A:	İ	į	İ	į
Scoba	Fair		Fair	
	Thickest layer	0.00	:	0.02  0.50
	Bottom layer	0.16	BOCCOM Tayer	0.50
853C:	į	į	į	į
Frogcreek	Poor		Fair	
	Thickest layer   Bottom layer	0.00	Thickest layer Bottom layer	0.03  0.09
Stinnett	Poor	1	Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.09
Wozny	Poor	i	Fair	i
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.09
856B:	İ		 	
Stinnett	Poor	İ	Fair	ĺ
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.09
857B:		i		İ
Frogcreek	Poor	1	Fair	
	Thickest layer	0.00	Thickest layer	0.03
	Bottom layer	0.00	Bottom layer	0.09
857C:	İ	į	İ	į
Frogcreek			Fair	
	Thickest layer   Bottom layer	0.00	Thickest layer Bottom layer	0.03  0.09
	Boccom Tayer		Boccom Tayer	
873B:	į	İ		İ
Stanberry		1	Fair	
	Thickest layer   Bottom layer	0.00	Thickest layer   Bottom layer	0.03  0.07
	Boccom Tayer		Boccom Tayer	
873C:				ļ
Stanberry		1	Fair	
	Thickest layer   Bottom layer	0.00	-	0.03  0.07
873D:				
Stanberry	Poor   Thickest layer	0.00	Fair   Thickest layer	0.03
	Bottom layer	0.00	Bottom layer	0.03
	i	į	į	į

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as so of gravel	ource	   Potential as sou   of sand 	irce
	Rating class	Value	Rating class	Value
905A: Cublake	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Bottom layer   Thickest layer	0.00
926A: Flink	  Poor   Bottom layer   Thickest layer	0.00		0.00
943D: Stanberry	  Poor   Thickest layer   Bottom layer	0.00	   Fair   Thickest layer   Bottom layer	0.03
Greenwood	Poor   Bottom layer   Thickest layer	0.00	Poor   Bottom layer   Thickest layer	0.00
948A: Billyboy	  Fair   Thickest layer   Bottom layer	0.00	· -	0.00
970C: Keweenaw	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Bottom layer   Thickest layer	  0.10  0.11
Pence	  Fair   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.03
Greenwood	  Not rated 		  Not rated 	
970E: Keweenaw	  Poor   Bottom layer   Thickest layer	0.00	-	0.10
Pence	  Fair   Thickest layer   Bottom layer 	0.00	  Fair   Thickest layer   Bottom layer	0.03
Greenwood	Not rated	į į	Not rated	į į
1070C: Fremstadt	  Poor   Thickest layer   Bottom layer	0.00	  Fair   Bottom layer   Thickest layer	    0.07  0.07
Cress	  Fair   Thickest layer   Bottom layer 	  0.00  0.16	  Fair   Thickest layer   Bottom layer	  0.08  0.50
1070D: Fremstadt	  Poor   Thickest layer   Bottom layer	0.00	  Fair   Bottom layer   Thickest layer	0.07

Table 20a.--Construction Materials--Continued

Map symbol and soil name	   Potential as so   of gravel 	ource	   Potential as sou   of sand 	ırce
	Rating class	Value	Rating class	Value
1070D: Cress	    Fair   Thickest layer   Bottom layer	    0.00  0.16		    0.08  0.50
1080B: Spoonerhill	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Bottom layer   Thickest layer	0.10
Spoonerhill, stony	  Poor   Bottom layer   Thickest layer	  0.00  0.00	  Fair   Bottom layer   Thickest layer	0.11
Cress	  Fair   Thickest layer   Bottom layer 	  0.00  0.16	  Fair   Thickest layer   Bottom layer	0.08
1653C: Stanberry	  Poor   Thickest layer   Bottom layer	0.00	:	0.03
Parkfalls	  Poor   Thickest layer   Bottom layer 	0.00	:	0.03
Wozny	  Poor   Thickest layer   Bottom layer	0.00	:	0.00
2015:			 	
Pits	Not rated 		Not rated 	
2050: Landfill	  Not rated 		  Not rated 	     
3011A: Barronett	  Poor   Bottom layer   Thickest layer	  0.00  0.00	  Poor   Bottom layer   Thickest layer	0.00
3125A: Meehan	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	0.48
3126A: Wurtsmith	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	0.54
3276A: Au Gres	  Poor   Bottom layer   Thickest layer	    0.00  0.00	  Fair   Thickest layer   Bottom layer	    0.72  0.86
3312B: Glendenning, very stony	    Poor   Bottom layer   Thickest layer	0.00	    Fair   Bottom layer   Thickest layer	    0.03  0.04

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as so of gravel	urce	   Potential as sou   of sand	ırce
	Rating class	Value	Rating class	Value
3312B: Glendenning	  Poor   Bottom layer   Thickest layer	0.00	    Fair   Bottom layer   Thickest layer	    0.03  0.04
3336A: Fenander	  Poor   Bottom layer   Thickest layer	    0.00  0.00	  Poor   Bottom layer   Thickest layer	0.00
3403A: Loxley	  Poor   Bottom layer   Thickest layer	0.00	  Poor   Bottom layer   Thickest layer	0.00
Beseman	Poor   Bottom layer   Thickest layer	0.00	Poor   Bottom layer   Thickest layer	0.00
Dawson	  Poor   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.00
3424C: Frogcreek	  Poor   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.03
Magroc	  Poor   Thickest layer   Bottom layer	0.00	  Fair   Bottom layer   Thickest layer	0.10
Stinnett	  Poor   Thickest layer   Bottom layer	0.00	  Fair   Thickest layer   Bottom layer	0.00
Rock outcrop	  Not rated		  Not rated	
3446A: Newson	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Bottom layer   Thickest layer	0.82
3448B: Grettum	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	0.36
3448C: Grettum	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	0.36
3516A: Slimlake	  Poor   Bottom layer   Thickest layer	0.00	  Fair   Thickest layer   Bottom layer	0.54
3629B: Perida	  Poor   Bottom layer   Thickest layer 	0.00	  Fair   Bottom layer   Thickest layer	0.58

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as so of gravel	ource	Potential as source	
	Rating class	Value	Rating class	Value
M-W: Miscellaneous water	    Not rated 		    Not rated 	
W: Water	    Not rated 		    Not rated	

## Table 20b.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Potential as source reclamation mater		Potential as sou of roadfill	rce	Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and   limiting features		Rating class and   limiting features	Valu
3A: Totagatic	Too sandy Low content of organic matter	0.00	: -	!	  Poor   Too sandy   Depth to   saturated zone	      0.00  0.00
Bowstring	Too acid    Good   	0.68         	  Poor   Depth to   saturated zone 	!	  Poor   Depth to   saturated zone   Content of   organic matter	    0.00    0.00
Ausable	Poor   Too sandy   Low content of   organic matter   Too acid	  0.00  0.12    0.97	: -	!	  Poor   Too sandy   Depth to   saturated zone	  0.00  0.00 
22A: Comstock	  Fair   Low content of   organic matter   Too acid   Water erosion	    0.12    0.54  0.90	saturated zone	!	saturated zone	    0.00    0.98
24A: Poskin	  Fair   Low content of   organic matter   Too acid   Water erosion	    0.12    0.68  0.90	  Poor   Depth to   saturated zone	!	   Poor   Depth to   saturated zone   Hard to reclaim   (rock fragments)	
27A: Scott Lake	  Fair   Low content of   organic matter   Too acid   Droughty	  0.12    0.68  0.95	  Fair   Depth to   saturated zone   	1	saturated zone	
28B: Haugen, very stony	  Fair   Low content of   organic matter   Too acid 	    0.12    0.54   	  Fair   Depth to   saturated zone   	    0.53           	Poor   Hard to reclaim (dense layer)   Rock fragments   Depth to   saturated zone   Hard to reclaim (rock fragments)   Too acid	    0.00    0.00  0.53    0.92 

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of     reclamation material		   Potential as sou   of roadfill 	rce	Potential as source   of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		<u> </u>				<u> </u>
28B:		İ		ĺ	İ	İ
Haugen			Fair		Poor	
	Low content of	0.12	Depth to	0.53	Hard to reclaim	0.00
	organic matter		saturated zone		(dense layer)	
	Too acid	0.54	 		Rock fragments	0.00
	 		 		Depth to saturated zone	0.53
	 		 	İ	!	0.92
				i	(rock fragments)	
		i		i	Too acid	0.98
		i		į		į
Rosholt, very stony	Fair		Good		Fair	
	Low content of	0.12			Rock fragments	0.12
	organic matter				Hard to reclaim	0.32
	Droughty	0.60		ļ	(rock fragments)	
	Too acid	0.68	 		 	
Rosholt	  Fair		  Good	İ	  Fair	ì
	Low content of	0.12		i	Rock fragments	0.12
	organic matter	İ		İ	Hard to reclaim	0.50
	Droughty	0.67		ĺ	(rock fragments)	İ
	Too acid	0.68		ļ		ļ
28C:	l I		l I		l	
Haugen, very stony	  Fair		  Fair	1	Poor	
naugen, very seem	Low content of	0.12		0.53	!	0.00
	organic matter		saturated zone	1	(dense layer)	1
	Too acid	0.54		į	Rock fragments	0.00
					Depth to	0.53
					saturated zone	
					!	0.92
				ļ	(rock fragments)	1
	İ		İ		Slope	0.96
	 		 		Too acid	0.98
Haugen	  Fair	i	  Fair	İ	Poor	ì
	Low content of	0.12	Depth to	0.53	Hard to reclaim	0.00
	organic matter		saturated zone		(dense layer)	
	Too acid	0.54			Rock fragments	0.00
		!		ļ	Depth to	0.53
					saturated zone	
	l I		l I			0.92
	 		 	1	(rock fragments)   Slope	0.96
	 		 	i	Too acid	0.98
		į		į		į
Rosholt, very stony			Good		Fair	
	Low content of	0.12		ļ	Rock fragments	0.12
	organic matter	10.00	  -	Į Į	Hard to reclaim	0.32
	Droughty Too acid	0.60	 		(rock fragments)   Slope	0.96
Rosholt	Fair	İ	Good	İ	Fair	İ
	Low content of	0.12		ļ	Rock fragments	0.12
	organic matter			ļ	Hard to reclaim	0.50
	Droughty Too acid	0.67		ļ	(rock fragments)	0.96
		0.68			Slope	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source reclamation mater		Potential as source of roadfill		Potential as source   of topsoil 		
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value	
33B:							
Chetek	Poor		Good		Poor		
	Too sandy	0.00			Too sandy	0.00	
	Droughty	0.06	ĺ	İ	Rock fragments	0.00	
	Low content of	0.12			Hard to reclaim	0.32	
	organic matter Too acid	0.84	 		(rock fragments)		
225						į	
33C:						1	
Chetek			Good		Poor		
	Too sandy	0.00	!	!	Too sandy	0.00	
	Droughty	0.06	!	!	Rock fragments	0.00	
	Low content of	0.12	!	!	Hard to reclaim	0.32	
	organic matter				(rock fragments)	1	
	Too acid	0.84	 		Slope 	0.96	
38A: Rosholt	 	į	Cood	į		į	
ROSHOIC	!		Good		Fair	10 10	
	Low content of	0.12	 		Rock fragments Hard to reclaim	0.12	
	organic matter		 		!	0.50	
	Droughty	0.67	 		(rock fragments)	1	
	Too acid	0.68 	 		 		
38B:							
Rosholt	!		Good		Fair		
	Low content of	0.12			Rock fragments	0.12	
	organic matter				Hard to reclaim	0.50	
	Droughty	0.67			(rock fragments)	!	
	Too acid	0.68	 		 		
38C:	İ		İ	İ	İ	į	
Rosholt	Fair		Good		Fair		
	Low content of	0.12			Rock fragments	0.12	
	organic matter				Hard to reclaim	0.50	
	Droughty	0.67			(rock fragments)		
	Too acid	0.68	 		Slope 	0.96	
38D:	<u>.</u>	į		į		į	
Rosholt			Fair	1	Poor		
	Low content of	0.12	Slope	0.98	Slope	0.00	
	organic matter				Rock fragments	0.12	
	Droughty Too acid	0.67	 		Hard to reclaim (rock fragments)	0.50	
100	į	į		į		į	
42D: Amery	  Fair		  Fair		  Poor		
-	Low content of	0.12	Slope	0.98	Slope	0.00	
	organic matter	İ	_	İ	Rock fragments	0.00	
	Too acid	0.54			Hard to reclaim	0.03	
					(dense layer)	1	
	İ	İ	İ	İ	Hard to reclaim	0.92	
					(rock fragments)		
	 		 		Too acid	0.98	
43B:			 		 		
Antigo	Fair		Good		Fair		
	Low content of	0.12			Hard to reclaim	0.68	
5-	Low Content of	1	•	'	•		
	organic matter		İ	į	(rock fragments)	ĺ	
	!	0.68		į Į	rock fragments)	İ İ	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc   reclamation mater		   Potential as sou   of roadfill 	rce	Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
43C: Antigo	Low content of organic matter Too acid	    0.12    0.68  0.90	  Good   	           	: -	    0.63  0.68 
43D: Antigo	  Fair   Low content of   organic matter   Too acid   Water erosion	    0.12    0.68  0.90	  Fair   Slope 	    0.08     	: -	    0.00  0.68   
48A: Brill	  Fair   Low content of   organic matter   Too acid   Water erosion	  0.12    0.68  0.90	  Fair   Depth to   saturated zone   	    0.14     	  Fair   Depth to   saturated zone   Hard to reclaim   (rock fragments)	
63A: Crystal Lake	Fair   Low content of   organic matter   Too acid   Water erosion	  0.12    0.54  0.90	   Fair   Depth to   saturated zone   	    0.53     	saturated zone	  0.53    0.98
63B: Crystal Lake	Low content of organic matter Too acid	    0.12    0.54  0.90	  Fair   Depth to   saturated zone	    0.53     	saturated zone	    0.53    0.98
63C: Crystal Lake	  Fair   Low content of   organic matter   Too acid   Water erosion	    0.12    0.54  0.90	saturated zone	    0.53     	saturated zone	  0.53    0.96  0.98
63E: Crystal Lake	  Fair   Low content of   organic matter   Too acid   Water erosion	  0.12    0.54  0.90	   Poor   Slope   Depth to   saturated zone	  0.00  0.89 	:	0.00
64A: Totagatic	Poor   Too sandy   Low content of   organic matter   Too acid	  0.00  0.12    0.68	  Poor   Depth to   saturated zone   	    0.00     	  Poor   Too sandy   Depth to   saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc   reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
64A:	 		[ [		 	
Winterfield	Poor	i	Poor	i	Poor	i
	Too sandy	0.00	Depth to	0.00	!	0.00
	Wind erosion	0.00	saturated zone		Depth to	0.00
	Low content of	0.12	İ	i	saturated zone	i
	organic matter	i	!	i	!	0.88
	Droughty	0.48		į		į
69B:	 				 	
Keweenaw	Poor	i	Good	İ	Fair	i
	Wind erosion	0.00	İ	İ	Too sandy	0.04
	Too sandy	0.04	İ	İ	Rock fragments	0.88
	Low content of	0.12	İ	İ	İ	İ
	organic matter	İ	İ	İ	İ	İ
	Too acid	0.68		į		į
Sayner	  Poor		  Good		  Poor	
-	Too sandy	0.00	İ	i	Too sandy	0.00
	Wind erosion	0.00	İ	i	-	0.00
	Droughty	0.01		İ	Hard to reclaim	0.50
	Low content of	0.12		İ	(rock fragments)	i
	organic matter	i	İ	i	i	i
	Too acid	0.54		į		į
Vilas	  Poor		  Good		  Poor	
	Too sandy	0.00	!	i	Too sandy	0.00
	Wind erosion	0.00		İ	Rock fragments	0.97
	Low content of	0.12		İ	İ	i
	organic matter	i		İ	İ	i
	Too acid	0.68	İ	İ	İ	İ
	Droughty	0.96				
69C:	 				 	
Keweenaw	Poor	i	Good	İ	Fair	i
	Wind erosion	0.00	İ	İ	Too sandy	0.04
	Too sandy	0.04		İ	Slope	0.84
	Low content of	0.12			Rock fragments	0.88
	organic matter					
	Too acid	0.68				
Sayner	  Poor		  Good		  Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Rock fragments	0.00
	Droughty	0.01			Hard to reclaim	0.50
	Low content of	0.12			(rock fragments)	
	organic matter				Slope	0.84
	Too acid	0.54	 		 	 
Vilas	!	į	Good		Poor	į
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Slope	0.84
	Low content of	0.12			Rock fragments	0.97
	organic matter	[			!	!
	Too acid	0.68			!	!
	Droughty	0.96	t contract the contract to the	1	·	1

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of   reclamation material		Potential as sou of roadfill	rce	Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
69E:						
Keweenaw	Poor		Poor		Poor	
	Wind erosion	0.00	Slope	0.00		0.00
	Too sandy	0.04	 	i	Too sandy	0.04
	Low content of	0.12	İ	İ	Rock fragments	0.88
	organic matter Too acid	  0.68	 		 	
Sayner	Poor		  Poor		  Poor	
buyiici	Too sandy	0.00	Slope	0.00		0.00
	Wind erosion	0.00			Too sandy	0.00
	Droughty	0.01	İ	į	Rock fragments	0.00
	Low content of	0.12	İ	İ	Hard to reclaim	0.50
	organic matter				(rock fragments)	
	Too acid	0.54	 		 	
Vilas	Poor		Poor	İ	Poor	İ
	Too sandy	0.00	Slope	0.00	:	0.00
	Wind erosion	0.00			Too sandy	0.00
	Low content of organic matter	0.12	  -		Rock fragments	0.97
	Too acid	0.68	 		 	l I
	Droughty	0.96	 			İ
				İ		İ
74B:	  Page		l a		I Donor	
Vilas	Too sandy	0.00	Good		Poor   Too sandy	0.00
	Wind erosion	0.00	 		Rock fragments	0.97
	Low content of	0.12	 	i		
	organic matter	i		i		i
	Too acid	0.68	İ	İ		Ì
	Droughty	0.96				
74C:			 			l I
Vilas	Poor	į	Good	į	Poor	į
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00		!	Slope	0.63
	Low content of	0.12			Rock fragments	0.97
	organic matter Too acid	0.68	 		 	l I
	Droughty	0.96				
74D:						
Vilas	Poor	i	  Fair		Poor	i i
	Too sandy	0.00	Slope	0.08	Slope	0.00
	Wind erosion	0.00	İ	i	Too sandy	0.00
	Low content of	0.12	İ	İ	Rock fragments	0.97
	organic matter					
	Too acid	0.68		!		ļ
	Droughty	0.96	 		 	
100B:						
Menahga			Good		Poor	
	Wind erosion	0.00	!	[	Too sandy	0.00
	Too sandy	0.00		1	Too acid	0.88
	Low content of	0.12	  -	1		Į.
	organic matter	0.23	 	1	] 	1
	Droughty   Too acid	0.50	 		 	I I
	100 4014	0.50	I .	1	I .	1

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc   reclamation mater		Potential as sou of roadfill	irce	Potential as sour	ce
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
100C:						
Menahga	Poor   Wind erosion   Too sandy	0.00	Good   		Poor Too sandy Too acid	0.00
	Low content of organic matter Too acid Droughty	0.12    0.50  0.60	 	     	Slope    -	0.96
100D:		1	 	1	 	1
Menahga	Poor		  Fair		Poor	
Menanga	Wind erosion	0.00	Slope	0.32	!	0.00
	Too sandy	0.00	biope	0.52	Too sandy	0.00
	Low content of	0.12	I 	i i	Too acid	0.88
	organic matter		i I			
	Too acid	0.50		i		i
	Droughty	0.60				į
127D:			 		 	
Amery	Fair		Fair		Poor	
	Low content of	0.12	Slope	0.98	Slope	0.00
	organic matter				Rock fragments	0.00
	Too acid	0.54			!	0.03
					(dense layer)	
					!	0.92
					(rock fragments)	1
			 		Too acid 	0.98
Rosholt	Fair	į	Fair		Poor	İ
	Low content of	0.12	Slope	0.98	Slope	0.00
	organic matter				Rock fragments	0.12
	Droughty	0.60			Hard to reclaim	0.32
	Too acid	0.68	 		(rock fragments)	l I
127E:		į				
Amery	!	!	Poor	!	Poor	
	Low content of	0.12	Slope	0.00	Slope	0.00
	organic matter				Rock fragments	0.00
	Too acid	0.54	 		Hard to reclaim (dense layer)	0.03
			 			0.92
					(rock fragments)	
			l		Too acid	0.98
Rosholt	  Fair		  Poor		  Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
	Droughty	0.60	 	l I	Rock fragments Hard to reclaim	0.12
	Too acid	0.68	 		(rock fragments)	
15CD.						
156B: Magnor, very stony	  Fair		  Poor		  Poor	
	Low content of organic matter	0.12	Depth to saturated zone	0.00	Hard to reclaim (dense layer)	0.00
	Too acid	0.20	Sacurated zone	1	Depth to	0.00
	Water erosion	0.20	! 		saturated zone	
			! !	i		0.00
					Rock fragments	0.00
			 		Hard to reclaim	0.92

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc   reclamation mater		   Potential as sou   of roadfill 	rce	Potential as sour of topsoil	Potential as source of topsoil	
	Rating class and	Value	Rating class and	Value	Rating class and	Value	
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>	
156B: Magnor	    Fair	   	    Poor	   	    Poor	   	
	Low content of organic matter Too acid Water erosion	0.12	!	0.00	Hard to reclaim (dense layer) Depth to saturated zone Rock fragments Hard to reclaim	0.00	
	 		 		(rock fragments)		
157B:	İ	i		i		i	
Freeon, very stony	Fair Low content of organic matter Too acid Water erosion	  0.12    0.68  0.90	Poor   Depth to   saturated zone	  0.00     	Poor Depth to saturated zone Rock fragments Hard to reclaim (rock fragments)	1	
Freeon	  Fair   Low content of   organic matter   Too acid	  0.12    0.61	  Poor   Depth to   saturated zone 	    0.00 	  Poor   Depth to   saturated zone   Rock fragments	  0.00    0.00	
	Water erosion	0.90				0.92	
157C:	 		 		 		
Freeon, very stony	Fair   Low content of   organic matter   Too acid   Water erosion	  0.12    0.68  0.90	Poor   Depth to   saturated zone	  0.00     	saturated zone	0.00	
Freeon	Fair   Low content of   organic matter   Too acid   Water erosion	  0.12    0.61  0.90	  Poor   Depth to   saturated zone   	  0.00       	saturated zone	  0.00    0.00  0.92    0.96	
1607.	 		l I		l		
160A: Oesterle	  Fair   Low content of   organic matter   Too acid   Droughty	  0.12    0.68  0.91 	  Poor   Depth to   saturated zone   	  0.00       	Poor   Depth to   saturated zone   Rock fragments   Hard to reclaim   (rock fragments)	  0.00    0.12  0.32 	
182B: Padus	  Fair   Low content of   organic matter   Too acid 	  0.12    0.54	  Good       	         	  Fair   Hard to reclaim   (rock fragments)   Rock fragments   Too acid	  0.68    0.98  0.98	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
182C: Padus	  Fair   Low content of   organic matter   Too acid 	    0.12    0.54	  Good       	         	  Fair   Slope   Hard to reclaim   (rock fragments)   Rock fragments   Too acid	    0.63  0.68    0.98
192A: Worcester	  Fair   Low content of   organic matter   Too acid   Droughty	    0.12    0.54  0.96	  Poor   Depth to   saturated zone   	    0.00       	Poor   Depth to   saturated zone   Rock fragments   Hard to reclaim   (rock fragments)	    0.00    0.12  0.68
193A: Minocqua	  Fair   Low content of   organic matter   Too acid   Water erosion	  0.12    0.68  0.99	  Poor   Depth to   saturated zone 	    0.00     	Poor   Depth to   saturated zone   Rock fragments   Hard to reclaim   (rock fragments)	  0.00    0.12  0.68
215B: Pence	Poor   Too sandy   Low content of   organic matter   Droughty   Too acid	  0.00  0.12    0.26  0.54	  Good       	           	  Poor   Too sandy   Rock fragments   Hard to reclaim   (rock fragments)	  0.00  0.00  0.32 
215C: Pence	Poor   Too sandy   Low content of   organic matter   Droughty   Too acid	  0.00  0.12    0.26  0.54	  Good       	           	Poor   Too sandy   Rock fragments   Hard to reclaim   (rock fragments)   Slope	  0.00  0.00  0.32    0.63
215D: Pence	Poor   Too sandy   Low content of   organic matter   Droughty   Too acid	  0.00  0.12    0.26  0.54	  Fair   Slope     	  0.08       	Poor   Slope   Too sandy   Rock fragments   Hard to reclaim   (rock fragments)	  0.00  0.00  0.00  0.32
315A: Rib	  Fair   Low content of   organic matter   Too acid   Water erosion	  0.12    0.88  0.90	  Poor   Depth to   saturated zone   	    0.00     	saturated zone	    0.00    0.68
337A: Plover	  Fair   Low content of   organic matter   Too acid	0.12	  Poor   Depth to   saturated zone 	    0.00   	  Poor   Depth to   saturated zone 	    0.00   

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of   reclamation material		Potential as sou of roadfill	rce	Potential as source of topsoil	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features		limiting features	
368B:	l I		 		 	
Mahtomedi	Poor	i	Good	i	Poor	i
	Too sandy	0.00	İ	i	Too sandy	0.00
	Wind erosion	0.00		İ	Rock fragments	0.00
	Droughty	0.00			Hard to reclaim	0.92
	Low content of	0.12			(rock fragments)	
	organic matter					
	Too acid	0.84				
Cress	Pair		  Good		  Fair	
Cless	Low content of	0.12	9000	I I	Rock fragments	0.02
	organic matter	0.12	 	İ	Too sandy	0.22
	Too sandy	0.22	! 	i	<u>-</u>	0.32
	Droughty	0.40		i	(rock fragments)	
	Too acid	0.54		i	Too acid	0.98
368C:						
Mahtomedi			Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion Droughty	0.00	l I		Rock fragments Hard to reclaim	0.00
	Low content of	0.00	 	I	(rock fragments)	
	organic matter	0.12	 		Slope	0.96
	Too acid	0.84	 	i		
	İ	i		i		i
Cress	Fair		Good		Fair	
	Low content of	0.12			Rock fragments	0.02
	organic matter				Too sandy	0.22
	Too sandy	0.22			Hard to reclaim	0.32
	Droughty Too acid	0.40  0.54	  -		(rock fragments)	0.96
	100 acid	0.54	 	i	Slope   Too acid	0.98
	i	i		i		
368D:						
Mahtomedi			Fair		Poor	
	Too sandy	0.00	Slope	0.50	-	0.00
	Wind erosion	0.00			Slope	0.00
	Droughty Low content of	0.00	l I		Rock fragments Hard to reclaim	0.00
	organic matter	0.12	 		(rock fragments)	
	Too acid	0.84	 	1	(10ck llagments)	
		i	İ	i		i
Cress	Fair	İ	Fair	İ	Poor	
	Low content of	0.12	Slope	0.50	Slope	0.00
	organic matter	!			Rock fragments	0.02
	Too sandy	0.22			Too sandy	0.22
	Droughty	0.40	 		Hard to reclaim	0.32
	Too acid	0.54	 		(rock fragments) Too acid	0.98
		i	 	1	100 aciu	
371A:	i	i		i		İ
Croswell	Poor		Fair		Poor	
	Too sandy	0.00	Depth to	0.53	Too sandy	0.00
	Wind erosion	0.00	saturated zone		Depth to	0.53
	Low content of	0.12		!	saturated zone	
	organic matter			1	Rock fragments	0.97
	Droughty Too acid	0.33				
				1		

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source reclamation mater		Potential as sou of roadfill	rce	Potential as source   of topsoil 	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
380B:			 		 	
Cress	!		Good		Fair	
	Low content of	0.12			Rock fragments	0.02
	organic matter				Too sandy	0.22
	Too sandy	0.22				0.32
	Droughty Too acid	0.40 0.54	 		(rock fragments)   Too acid	0.98
Rosholt	Fair		  Good		  Fair	 
RODIIO10	Low content of	0.12			Rock fragments	0.12
	organic matter					0.50
	Droughty	0.67		i	(rock fragments)	!
	Too acid	0.68		į		į
380C:			 		 	
Cress	Fair	j	Good	i	Fair	į
	Low content of	0.12		İ	Rock fragments	0.02
	organic matter				Too sandy	0.22
	Too sandy	0.22			Hard to reclaim	0.32
	Droughty	0.40			(rock fragments)	
	Too acid	0.54			Slope	0.96
			 		Too acid 	0.98
Rosholt	Fair	İ	Good	i	Fair	į
	Low content of	0.12			Rock fragments	0.12
	organic matter				Hard to reclaim	0.50
	Droughty	0.67			(rock fragments)	
	Too acid	0.68	l		Slope	0.96
380D:						
Cress	Fair	1	Fair		Poor	
	Low content of	0.12	Slope	0.32		0.00
	organic matter				Rock fragments	0.02
	Too sandy	0.22			Too sandy	0.22
	Droughty Too acid	0.40  0.54	 		Hard to reclaim (rock fragments)	0.32
					Too acid	0.98
Rosholt	Fair		  Fair		  Poor	
ROSHOIC	Low content of	0.12	Slope	0.32	!	0.00
	organic matter				Rock fragments	0.12
	Droughty	0.67		i	Hard to reclaim	0.50
	Too acid	0.68	į	į	(rock fragments)	į
383B:			 		 	 
Mahtomedi	Poor	İ	Good	İ	Poor	İ
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Rock fragments	0.00
	Droughty	0.00			Hard to reclaim	0.92
	Low content of	0.12			(rock fragments)	
	organic matter Too acid	0.84	l I		l I	
	100 actu				 	
383C: Mahtomedi	Poor		  Good		  Poor	
rancomedi	Too sandy	0.00	G00a 		Poor   Too sandy	0.00
	Wind erosion	0.00	 		· -	0.00
	"TITG CLOBIOII	1	1 1			0.92
	Droughty	10.00				
	Droughty Low content of	0.00	 		Hard to reclaim (rock fragments)	1
		1	 	   	!	1

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source   reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
383D:			 			
Mahtomedi	Poor	İ	Fair	į	Poor	į
	Too sandy	0.00	Slope	0.32	Too sandy	0.00
	Wind erosion	0.00			Slope	0.00
	Droughty	0.00				0.00
	Low content of	0.12		ļ	!	0.92
	organic matter Too acid	0.84	  -		(rock fragments)	
	100 acid		 		 	
396B:	į	į		į		į
Friendship			Good	ļ	Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			1	
	Droughty Low content of	0.10	 		 	
	organic matter	0.12	 		 	
	Too acid	0.68				
Wurtsmith	  Page 1		  Fair		l Danasa	1
wurtsmith	Too sandy	0.00	Depth to	0.53	Poor   Too sandy	0.00
	Wind erosion	0.00	saturated zone	0.33	Depth to	0.53
	Low content of	0.12		i	saturated zone	
	organic matter	i		i	Too acid	0.76
	Droughty	0.13	İ	į	Rock fragments	0.97
	Too acid	0.50				
Grayling	Poor		  Good		  Poor	 
	Too sandy	0.00	İ	į	Too sandy	0.00
	Wind erosion	0.00				
	Droughty	0.00				
	Low content of	0.12				
	organic matter Too acid	0.50	 		l	
397A:						
Perchlake	!	1	Poor		Poor	
	Too sandy Wind erosion	0.00	Depth to saturated zone	0.00	Too sandy Depth to	0.00
	Low content of	0.12	saturated zone		saturated zone	10.00
	organic matter		! 	i		ì
	Too acid	0.68		i		ì
	Droughty	0.75		į		į
399B:	 		 		 	l I
Grayling	Poor	i	  Good	i	Poor	i
	Too sandy	0.00	İ	İ	Too sandy	0.00
	Wind erosion	0.00	İ	ĺ		Ì
	Droughty	0.00				
	Low content of	0.12				!
	organic matter Too acid	0.50	 		 	
						İ
399C:	   Deem		Cood		   Doom	
Grayling	Too sandy	0.00	Good	1	Poor   Too sandy	0.00
	Too sandy   Wind erosion	0.00	 		Slope	0.96
	Droughty	0.00	! 	i		
	Low content of	0.12		i		i
	organic matter	i ·	İ	i		i
	Too acid	0.50				
	I			1	1	I

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc   reclamation mater		Potential as source of roadfill		Potential as source   of topsoil	
	Rating class and	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
399D: Grayling	Poor   Too sandy   Wind erosion   Droughty   Low content of organic matter   Too acid	    0.00  0.00  0.00  0.12 	  Fair   Slope     	      0.32       	  Poor   Too sandy   Slope 	      0.00  0.00   
405A: Lupton	  Good     		  Poor   Depth to   saturated zone 	    0.00   	  Poor   Depth to   saturated zone   Content of   organic matter	    0.00    0.00
Cathro	  Fair   Too acid   	  0.99   	   Poor   Depth to   saturated zone 	  0.00   	Poor	  0.00    0.00
Tawas	  Good     		  Poor   Depth to   saturated zone	  0.00   	Poor   Depth to   saturated zone   Content of   organic matter	  0.00    0.00
406A: Loxley	  Fair   Too acid   	    0.50     	  Poor   Depth to   saturated zone   	    0.00     	Poor   Depth to   saturated zone   Content of   organic matter   Too acid	  0.00    0.00    0.12
407A: Seelyeville	  Fair   Too acid   	0.88	  Poor   Depth to   saturated zone 	    0.00   	  Poor   Depth to   saturated zone   Content of   organic matter	0.00
Markey	  Good     		  Poor   Depth to   saturated zone 	  0.00     	  Poor   Depth to   saturated zone   Content of   organic matter	  0.00    0.00
410A: Seelyeville	  Fair   Too acid   	0.88	  Poor   Depth to   saturated zone 	    0.00   	Poor   Depth to   saturated zone   Content of   organic matter	  0.00    0.00
Cathro	  Fair   Too acid     	  0.99     	  Poor   Depth to   saturated zone   	  0.00     		  0.00    0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc   reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
412A:			 		 	
Rifle	Good	İ	Poor	İ	Poor	İ
			Depth to	0.00	Depth to	0.00
	[		saturated zone		saturated zone	
					Content of	0.00
	 		 		organic matter	
Tacoosh	Good	i	Poor	i	Poor	i
	İ	i	Depth to	0.00	Depth to	0.00
	İ	į	saturated zone	į	saturated zone	į
					Content of	0.00
		!		ļ	organic matter	ļ
415A:	 		 	l	 	
Greenwood	Fair	i	Poor	i	Poor	i
	Too acid	0.50	Depth to	0.00	Depth to	0.00
			saturated zone		saturated zone	
	!	!			Content of	0.00
					organic matter	
	 		 		Too acid	0.12
439B:		i		i	! 	i
Graycalm	Poor	İ	Good	į	Poor	İ
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.99
	Low content of	0.12		ļ		ļ
	organic matter					
	Too acid Droughty	0.50  0.75	1		 	
	Dioughty	0.75	 	i	 	i
Menahga	Poor	i	Good	i	Poor	i
	Wind erosion	0.00	İ	ĺ	Too sandy	0.00
	Too sandy	0.00			Too acid	0.88
	Low content of	0.12		ļ		ļ
	organic matter Too acid					
	Droughty	0.50  0.61	 		 	
				i		i
439C:	[		[		!	1
Graycalm			Good	ļ	Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion   Low content of	0.00	 		Slope Too acid	0.96
	organic matter	0.12	 		100 acid	0.99
	Too acid	0.50		i	 	i
	Droughty	0.75	j	į	İ	i
	[			ļ		
Menahga	'		Good		Poor	
	Wind erosion Too sandy	0.00	 		Too sandy Too acid	0.00
	Low content of	0.12	 		Too acid   Slope	0.88
	organic matter		! 	i		
	Too acid	0.50	İ	i		i
	Droughty	0.61	İ	İ	İ	į
	1		1	1		1

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	Potential as source of topsoil	
	Rating class and limiting features	Value	   Rating class and   limiting features	Value	   Rating class and   limiting features	Value	
439D:	 				 		
Graycalm	Poor	İ	Fair	İ	Poor	İ	
	Too sandy	0.00	Slope	0.32	Too sandy	0.00	
	Wind erosion	0.00			Slope	0.00	
	Low content of	0.12			Too acid	0.99	
	organic matter						
	Too acid	0.50					
	Droughty	0.75	  -				
Menahga	Poor		  Fair		Poor		
	Wind erosion	0.00	Slope	0.32		0.00	
	Too sandy	0.00			Too sandy	0.00	
	Low content of	0.12		i	Too acid	0.88	
	organic matter	İ	İ	İ	İ	İ	
	Too acid	0.50		İ		ĺ	
	Droughty	0.61	[		[	1	
4410.			  -				
441C: Freeon	Fair		Poor		Poor		
1100011	Low content of	0.12	!	0.00	•	0.00	
	organic matter		saturated zone		saturated zone	i	
	Too acid	0.61		i	Rock fragments	0.00	
	Water erosion	0.90	İ	İ	Slope	0.63	
		İ		İ	Hard to reclaim	0.92	
			 		(rock fragments)		
Cathro	  Not rated		  Poor		  Not rated		
		İ	Depth to	0.00		ĺ	
			saturated zone		!		
442C:			l		 		
Haugen	Fair		  Fair		Poor		
	Low content of	0.12	!	0.53	Hard to reclaim	0.00	
	organic matter		saturated zone		(dense layer)	i	
	Too acid	0.54		İ	Rock fragments	0.00	
		İ		İ	Depth to	0.53	
					saturated zone		
					Hard to reclaim	0.92	
					(rock fragments)		
			  -		Too acid	0.98	
Greenwood	Fair		  Poor		Poor		
GI COMWOOD	Too acid	0.50	Depth to	0.00	Depth to	0.00	
			saturated zone		saturated zone		
		i	!	i	Content of	0.00	
		İ		İ	organic matter	i	
			[		Too acid	0.12	
4420.			 				
443D: Amery	  Fair		  Poor		  Poor		
-	Low content of	0.12	Slope	0.00	1	0.00	
	organic matter	İ	_	İ	Rock fragments	0.00	
			I		Hard to reclaim	0.03	
	Too acid	0.54					
	Too acid	0.54 		İ	(dense layer)	j	
	Too acid	0.54		į Į	dense layer) Hard to reclaim	0.92	
	Too acid	0.54   	  -  -	 	(dense layer)	0.92	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source   reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
443D: Greenwood	  Fair   Too acid   	    0.50     	  Poor   Depth to   saturated zone   	    0.00     	Poor	0.00
461A: Bowstring	  Good       	         	  Poor   Depth to   saturated zone 	    0.00     	Poor   Depth to   saturated zone   Content of   organic matter	0.00
484A:	<u> </u>	į	į Į	į		į
Greenwood	Fair   Too acid   	  0.50     	Poor   Depth to   saturated zone   	  0.00     	Poor  Depth to saturated zone Content of organic matter Too acid	  0.00    0.00    0.12
Beseman	  Fair   Too acid   Water erosion   	  0.61  0.90   	  Poor   Depth to   saturated zone   	  0.00     	Poor   Depth to   saturated zone   Content of   organic matter   Too acid	0.00
495B:	 		 			
Karlsborg	Poor   Too sandy   Wind erosion   Low content of   organic matter   Too acid	  0.00  0.00  0.12    0.68	saturated zone	  0.14    0.95   	Depth to	0.00
Grettum	Poor   Wind erosion   Too sandy   Low content of   organic matter   Too acid   Droughty	  0.00  0.00  0.12    0.61  0.98	Good             	 	Poor Too sandy Too acid	0.00
Perida	Poor   Too sandy   Wind erosion   Low content of   organic matter   Too acid	  0.00  0.00  0.12    0.61	  Fair   Shrink-swell   	    0.99     	   Too sandy   Too acid 	0.00
495C:			 		 	
Karlsborg	Poor   Too sandy   Wind erosion   Low content of   organic matter   Too acid	  0.00  0.00  0.12    0.68	: -	  0.14    0.95 	Depth to	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of   reclamation material		Potential as sou of roadfill	rce	Potential as source of topsoil	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u>i</u>	limiting features	<u>i</u>	limiting features	<u>i</u>
495C:	 		l I		 	
Grettum	Poor		  Good		Poor	İ
	Wind erosion	0.00		İ	Too sandy	0.00
	Too sandy	0.00		į	Slope	0.96
	Low content of	0.12		į	Too acid	0.99
	organic matter	į	İ	į		İ
	Too acid	0.61				
	Droughty	0.98	 		 	
Perida	Poor		  Fair		  Poor	
	Too sandy	0.00	Shrink-swell	0.99	Too sandy	0.00
	Wind erosion	0.00			Slope	0.96
	Low content of	0.12			Too acid	0.99
	organic matter					
	Too acid	0.61	 		 	
495D:						i
Karlsborg			Fair		Poor	
	Too sandy	0.00	: <del>-</del>	0.14		0.00
	Wind erosion	0.00	!		Slope	0.00
	Low content of	0.12		0.32		0.14
	organic matter Too acid	0.68	Shrink-swell	0.95	saturated zone	
	Too acid	0.68				
Grettum	!	!	Fair		Poor	į
	Wind erosion	0.00	Slope	0.32		0.00
	Too sandy	0.00			Slope	0.00
	Low content of	0.12	İ		Too acid	0.99
	organic matter Too acid	0.61	 	1	 	1
	Droughty	0.98				
Dani da	  Page					
Perida	!	!	Fair	0.32	Poor	0.00
	Too sandy Wind erosion	0.00	<u>-</u>	0.99	-	0.00
	Low content of	0.12	1	0.55	Too acid	0.99
	organic matter		 	İ	100 4014	
	Too acid	0.61		ļ		
497A:			 		 	
Meenon	Poor	i	Poor	İ	Poor	i
	Too sandy	0.00	'	0.00	'	0.00
	Wind erosion	0.00	saturated zone	İ	Depth to	0.00
	Low content of	0.12			saturated zone	
	organic matter				Rock fragments	0.97
	Too acid	0.80				
	Droughty	0.97	 		 	
515A:						
Manitowish	!	!	Fair	:	Poor	
	Too sandy	0.00	Depth to	0.89	· -	0.00
	Low content of	0.12	saturated zone		Rock fragments	0.00
	organic matter				Hard to reclaim	0.68
	Droughty	0.37	 		(rock fragments)	1
	Too acid	0.54	 	1	Depth to saturated zone	0.89
	1	1	I .	1	salurated zone	1

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc   reclamation mater		Potential as sou of roadfill	rce	Potential as sour	ce
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
521A: Dody		    0.00  0.12    0.68	    Poor	    0.00    0.00  0.89	    Poor	      0.00  0.00
524E: Rock outcrop	    Not rated	   	    Not rated	   	    Not rated	   
Frogcreek	  Fair   Low content of   organic matter   Too acid   Water erosion	  0.12    0.54  0.99   	   Poor   Depth to   saturated zone   	    0.00         	(dense layer)   Depth to   saturated zone   Rock fragments	  0.00    0.00    0.88  0.92
Metonga	Fair   Low content of   organic matter   Too acid   Depth to bedrock   Droughty   Water erosion	0.12    0.50	  Poor   Depth to bedrock   Slope 	!	  Poor   Slope   Depth to bedrock   Too acid 	  0.00  0.58  0.76
542B: Haugen, very stony	  Fair   Low content of   organic matter   Too acid 	    0.12    0.54     	  Fair   Depth to   saturated zone   	    0.53         	(dense layer) Rock fragments Depth to saturated zone	    0.00  0.00  0.53    0.92 
Haugen	Fair   Low content of   organic matter   Too acid 	  0.12    0.54     	  Fair   Depth to   saturated zone   	    0.53           	Poor   Hard to reclaim   (dense layer)   Rock fragments   Depth to   saturated zone   Hard to reclaim   (rock fragments)   Too acid	  0.00  0.00  0.53    0.92 
542C: Haugen, very stony	  Fair   Low content of   organic matter   Too acid 	    0.12    0.54     	  Fair   Depth to   saturated zone   	    0.53             	Poor   Hard to reclaim (dense layer)   Rock fragments   Depth to   saturated zone   Hard to reclaim (rock fragments)   Slope   Too acid	   0.00   0.00   0.53   0.92   0.96   0.98

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of   reclamation material		Potential as sou of roadfill	Potential as source of roadfill		Potential as source of topsoil	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value	
542C:							
Haugen	Fair   Low content of   organic matter   Too acid	  0.12    0.54	Fair   Depth to   saturated zone 	  0.53   	Poor   Hard to reclaim   (dense layer)   Rock fragments   Depth to	  0.00    0.00  0.53	
					saturated zone Hard to reclaim (rock fragments)	0.92	
	   	   	   	   	Slope   Too acid 	0.98	
543B: Anigon	  Fair   Low content of   organic matter   Too acid   Water erosion	  0.12    0.68  0.90	  Good   	       	  Fair   Hard to reclaim   (rock fragments) 	    0.68   	
543C2:					i I	i 	
Anigon	Low content of organic matter	  0.12    0.68	Good   	     	Fair   Hard to reclaim   (rock fragments)   Slope	  0.68    0.96	
544F:	Water erosion 	0.90	 		 	   	
Menahga	Poor   Wind erosion   Too sandy   Low content of organic matter   Too acid   Droughty	  0.00  0.00  0.12    0.50  0.60	Poor   Slope 	  0.00     	  Poor   Slope   Too sandy   Too acid	0.00	
Mahtomedi	Poor   Too sandy   Wind erosion   Droughty   Low content of   organic matter   Too acid	  0.00  0.00  0.00  0.12 	Poor   Slope 	  0.00     	  Poor   Slope   Too sandy   Rock fragments   Hard to reclaim   (rock fragments)	  0.00  0.00  0.00  0.92	
555A: Fordum	  Fair   Low content of   organic matter   Water erosion	      0.88    0.99	  Poor   Depth to   saturated zone	      0.00	  Poor   Depth to   saturated zone   Rock fragments	      0.00    0.88	
574B: Sayner	 		      Good	     	ROCK Fragments	        0.00	
	Wind erosion   Droughty   Low content of   organic matter	0.00  0.01  0.12	 	     	Rock fragments   Hard to reclaim   (rock fragments)	0.00	
	Too acid	0.54	 		 		

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc		Potential as sou of roadfill	rce	Potential as source   of topsoil	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
574C:	 		 	 		 
Sayner	Poor	İ	Good	İ	Poor	İ
	Too sandy	0.00		ĺ	Too sandy	0.00
	Wind erosion	0.00			Rock fragments	0.00
	Droughty	0.01			Hard to reclaim	0.50
	Low content of	0.12			(rock fragments)	
	organic matter				Slope	0.63
	Too acid	0.54				
574E:	 		 		 	
Sayner	Poor	i	Poor		Poor	
_	Too sandy	0.00	Slope	0.00	Slope	0.00
	Wind erosion	0.00		ĺ	Too sandy	0.00
	Droughty	0.01		ĺ	Rock fragments	0.00
	Low content of	0.12			Hard to reclaim	0.50
	organic matter				(rock fragments)	
	Too acid	0.54	!		!	
579B:	İ		 	l I	1	
Parkfalls	Fair	i	Poor		Poor	
	Low content of	0.12	Depth to	0.00	Hard to reclaim	0.00
	organic matter	i	saturated zone	İ	(dense layer)	i
	Droughty	0.39	İ	İ	Depth to	0.00
	Too acid	0.68	İ	İ	saturated zone	İ
	!		!		Rock fragments	0.88
600A:				l i		
Haplosaprists	Not rated		  Not rated	l I	  Not rated	l I
napiosapiiscs		i	NOC Tated	 	Not lated	
Psammaquents	Not rated	į i	Not rated	į į	Not rated	į į
615B:	İ			İ		
Cress	Fair		Good		Fair	
	Low content of	0.12			Rock fragments	0.02
	organic matter					0.22
	Too sandy	0.22		ļ	!	0.32
	Droughty	0.40			(rock fragments)	
	Too acid	0.54	 	l I	Too acid	0.98
615C:						
Cress	Fair		Good		Fair	
	Low content of	0.12			Rock fragments	0.02
	organic matter					0.22
	Too sandy	0.22			Hard to reclaim	0.32
		0 40			(rock fragments)	
	Droughty	0.40	!			
	Droughty Too acid	0.40		į		0.96
			 		Slope   Too acid	0.96
615D:			 	     		
615D: Cress	Too acid		        Fair	       		
	Too acid		•	          0.32	Too acid	
	Too acid            Fair	0.54		          0.32	Too acid        Poor   Slope	0.98
	Too acid               Fair   Low content of	0.54		          0.32	Too acid         Poor   Slope   Rock fragments	0.98
	Too acid               Fair   Low content of   organic matter	0.54		          0.32	Too acid  Poor Slope Rock fragments Too sandy	0.98
	Too acid	0.54		          0.32     	Too acid  Poor Slope Rock fragments Too sandy	0.98       0.00   0.02   0.22   0.32

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of   reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
623A: Capitola	    Fair   Low content of		    Poor   Depth to		    Poor   Depth to	
	organic matter Too acid Water erosion Droughty	  0.88  0.90  0.99	saturated zone	     	saturated zone Hard to reclaim (dense layer) Rock fragments	  0.03    0.97
624A:	 		 		 	
Ossmer	Fair Low content of organic matter Too acid	  0.12    0.68	   Depth to   saturated zone	0.00	Poor Depth to saturated zone Hard to reclaim	  0.00    0.68
	Water erosion	0.99	 	İ	rock fragments)	İ I
632A: Aftad	Fair Too acid Low content of organic matter Water erosion	  0.68  0.88 	  Fair   Depth to   saturated zone	0.53	  Fair   Depth to   saturated zone	    0.53 
	water erosion					
632B: Aftad	Fair Too acid Low content of organic matter Water erosion	  0.68  0.88    0.90	: -	0.53	   Fair   Depth to   saturated zone 	    0.53   
632C: Aftad	!	1	    Fair		    Fair	
	Too acid Low content of organic matter Water erosion	0.68  0.88    0.90	Depth to   saturated zone   	0.53	Depth to   saturated zone   Slope 	0.53    0.96
633F:						
Pence	Poor Too sandy Low content of organic matter Droughty Too acid	  0.00  0.12    0.26  0.54	Poor   Slope     	  0.00     	Poor   Slope   Too sandy   Rock fragments   Hard to reclaim   (rock fragments)	  0.00  0.00  0.00  0.32
Padus	Fair Low content of organic matter Too acid	  0.12    0.54 	   Poor   Slope   	0.00	:	  0.00  0.68    0.98  0.98
648B:	[ [		 		 	
Sconsin	Fair Too acid Low content of organic matter Water erosion	  0.68  0.88 	Fair   Depth to   saturated zone 	  0.14 	Poor   Hard to reclaim   (dense layer)   Depth to   saturated zone	  0.00    0.14

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc   reclamation mater		Potential as sou of roadfill	rce	Potential as source of topsoil	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	1	limiting features	1	limiting features	<u> </u>
670C:	 		 	l I	 	
Keweenaw	Fair		  Good	i	  Fair	ì
110110011011	Low content of	0.12		i	Slope	0.63
	organic matter		 	i	Rock fragments	0.88
	Too acid	0.68		İ		i
	İ	į	İ	į		İ
Pence	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Low content of	0.12			Rock fragments	0.00
	organic matter				Hard to reclaim	0.32
	Droughty	0.26			(rock fragments)	
	Too acid	0.54		ļ	Slope	0.63
						1
670E:			   Dane		   Danne	
Keweenaw			Poor		Poor	10.00
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
	Too acid	0.68	 	i i	Rock fragments	1
			 	i		i
Pence	Poor	i	Poor	i	Poor	i
	Too sandy	0.00	Slope	0.00	Slope	0.00
	Low content of	0.12	. <u>.</u>	i	Too sandy	0.00
	organic matter	i		İ	Rock fragments	0.00
	Droughty	0.26	İ	İ	Hard to reclaim	0.32
	Too acid	0.54			(rock fragments)	
671B:	!					!
Spoonerhill, stony		1	Fair		Poor	
	Too sandy	0.00	Depth to	0.53	Hard to reclaim	0.00
	Low content of	0.12	saturated zone		(dense layer)	
	organic matter Too acid	0.68	 		Too sandy Depth to	0.00
	Droughty	0.96	 		saturated zone	0.55
	Droughty	10.30	 		Hard to reclaim	0.98
			 	i	(rock fragments)	
	İ	i		i	(=====,	i
Spoonerhill	Poor	İ	Fair	İ	Poor	İ
	Too sandy	0.00	Depth to	0.53	Hard to reclaim	0.00
	Low content of	0.12	saturated zone		(dense layer)	
	organic matter				Too sandy	0.00
	Too acid	0.68			Depth to	0.53
	Droughty	0.96			saturated zone	!
				ļ	!	0.98
					(rock fragments)	-
600B.	 		  -		 	1
680B: Stanberry, stony	  Fair	I	  Fair	I I	  Poor	
Standerry, Stony	Too acid	0.54	!	0.53	!	0.00
	Droughty	0.94	saturated zone	0.33	(dense layer)	
	Dioughey		Butaratea zone	i	Depth to	0.53
	i	i	İ	İ	saturated zone	
	į	į		İ	Too acid	0.98
Pence, stony	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Low content of	0.12			Rock fragments	0.00
			·	1		
	organic matter	!	!	!	Hard to reclaim	0.32
	organic matter Droughty Too acid	0.26	 		Hard to reclaim   (rock fragments)	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc   reclamation mater		Potential as sou of roadfill	rce	Potential as sour	ce
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
683A: Tipler	  Fair   Low content of   organic matter   Too acid   Droughty	    0.12    0.54  0.97	  Fair   Depth to   saturated zone   	    0.89       	  Fair   Rock fragments   Hard to reclaim   (rock fragments)   Depth to   saturated zone   Too acid	    0.12  0.68    0.89 
	İ	į	İ	į	j	İ
706A: Winterfield	Too sandy Low content of organic matter Droughty	0.00  0.12    0.80	   Poor   Depth to   saturated zone 	    0.00   	Poor   Too sandy   Depth to   saturated zone   Rock fragments	  0.00  0.00    0.88
	Water erosion	0.99	l		 	
Totagatic	Poor   Too sandy   Low content of   organic matter   Too acid   Droughty	  0.00  0.12    0.68  0.98	Poor   Depth to   saturated zone 	  0.00     	Poor   Too sandy   Depth to   saturated zone	0.00
724A:			 		 	
Rib	Fair   Low content of   organic matter   Too acid   Water erosion	  0.12    0.88  0.90	Poor   Depth to   saturated zone   	0.00	Poor   Depth to   saturated zone   Hard to reclaim   (rock fragments)	  0.00    0.68
Rock outcrop	  Not rated		  Not rated		  Not rated	
726B: Sissabagama	Poor   Wind erosion   Too sandy   Low content of   organic matter   Too acid	  0.00  0.00  0.12    0.68	  Fair   Depth to   saturated zone   	  0.89     	  Poor   Too sandy   Depth to   saturated zone 	  0.00  0.89   
733A:	 		 		 	
Wozny	Fair   Low content of   organic matter   Too acid   Water erosion	  0.88    0.88  0.90 	Poor   Depth to   saturated zone   	  0.00         	Poor   Depth to   saturated zone   Hard to reclaim   (rock fragments)   Rock fragments   Hard to reclaim   (dense layer)	  0.00    0.92    0.97  0.97
771A: Lenroot	Poor   Too sandy   Wind erosion   Droughty   Low content of organic matter   Too acid	    0.00  0.00  0.11  0.12    0.84	  Fair   Depth to   saturated zone   	    0.53       	Poor   Too sandy   Rock fragments   Depth to   saturated zone   Hard to reclaim   (rock fragments)	    0.00  0.00  0.53    0.92

Table 20b.--Construction Materials--Continued

Map symbol and soil name	   Potential as sourc   reclamation mater		   Potential as sou   of roadfill	rce	   Potential as sour   of topsoil	Potential as source of topsoil	
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value	
827A: Scoba	  Fair   Low content of   organic matter   Too acid   Droughty	    0.12    0.68  0.74	  Fair   Depth to   saturated zone   	      0.53       	(rock fragments)   Depth to   saturated zone		
853C: Frogcreek	Fair   Low content of   organic matter   Too acid   Water erosion	  0.12    0.54  0.99   	  Poor   Depth to   saturated zone   	    0.00         	(dense layer)   Depth to   saturated zone   Rock fragments	  0.00    0.00    0.88  0.92	
Stinnett	Fair   Low content of   organic matter   Too acid   Water erosion	  0.12    0.54  0.99	Poor   Depth to   saturated zone 	  0.00     	Poor   Hard to reclaim   (dense layer)   Depth to   saturated zone   Too acid	  0.00    0.00    0.98	
Wozny	  Fair   Low content of   organic matter   Too acid   Water erosion	  0.88    0.88  0.90 	   Poor   Depth to   saturated zone   	    0.00         	saturated zone Hard to reclaim (rock fragments)	  0.00    0.92    0.97  0.97	
856B: Stinnett	  Fair   Low content of   organic matter   Too acid   Water erosion	    0.12    0.54  0.99	  Poor   Depth to   saturated zone   	      0.00     	Poor   Hard to reclaim   (dense layer)   Depth to   saturated zone   Too acid	    0.00    0.00    0.98	
857B: Frogcreek	  Fair   Low content of   organic matter   Too acid   Water erosion	    0.12    0.54  0.99   	   Poor   Depth to   saturated zone   	    0.00         	Poor	   0.00   0.00   0.88   0.92	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc   reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
857C:	 		 		 	l I
Frogcreek	Fair	i	Poor	i	Poor	i
5	Low content of	0.12	Depth to	0.00	Hard to reclaim	0.00
	organic matter	j	saturated zone	į	(dense layer)	İ
	Too acid	0.54			Depth to	0.00
	Water erosion	0.99			saturated zone	
					Slope	0.84
					Rock fragments	0.88
					!	0.92
	l I		 		(rock fragments)	l I
873B:	 		 		 	
Stanberry	Fair	j	Fair	į	Poor	İ
	Too acid	0.54	Depth to	0.53	Hard to reclaim	0.00
	Droughty	0.94	saturated zone		(dense layer)	
					Depth to	0.53
		ļ			saturated zone	
					Too acid	0.98
873C:	 		l I		 	
Stanberry	  Fair		  Fair		Poor	
Standerry	Too acid	0.54	Depth to	0.53	!	0.00
	Droughty	0.94	saturated zone		(dense layer)	
		i		i	Depth to	0.53
		İ		İ	saturated zone	ĺ
					Slope	0.63
					Too acid	0.98
873D:	l I		 		 	l I
Stanberry	  Fair		  Fair		Poor	
Standerry	Too acid	0.54	'	0.08	•	0.00
	Droughty	0.94	Depth to	0.53	Hard to reclaim	0.00
	İ	İ	saturated zone	İ	(dense layer)	İ
					Depth to	0.53
					saturated zone	
					Too acid	0.98
905A:	 		 		 	l
Cublake	Poor		  Fair		  Fair	i
	Wind erosion	0.00	!	0.89	Too sandy	0.30
	Low content of	0.12	saturated zone	i	Too acid	0.76
	organic matter	İ		İ	Depth to	0.89
	Too acid	0.20			saturated zone	
	Too sandy	0.30			Rock fragments	0.97
	Droughty	0.99				
926A:	 		 		 	 
Flink	Poor		Poor	i	Poor	
	Too sandy	0.00	!	0.00	•	0.00
	Wind erosion	0.00				0.00
	Low content of	0.12			saturated zone	
	organic matter				Too acid	0.76
	Too acid	0.20				

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc   reclamation mater		Potential as sou of roadfill	rce	Potential as source   of topsoil	
	Rating class and	Value		Value	Rating class and	Value
	limiting features	1	limiting features	<u> </u> 	limiting features	<u> </u>
943D:		i		i		i
Stanberry	Fair	į	Fair	į	Poor	İ
	Too acid	0.54	Depth to	0.53	Hard to reclaim	0.00
	Droughty	0.94	saturated zone		(dense layer)	
			Slope	0.82		0.00
		!				0.53
				ļ	saturated zone	
					Too acid	0.98
C	Not weter		   Dane		   Dane	
Greenwood	NOT rated		Poor   Depth to	0.00	Poor   Depth to	0.00
		1	saturated zone	10.00	saturated zone	10.00
			Buturuteu zone	i	Content of	0.00
		i	! 	i	organic matter	
		i		i	Too acid	0.12
		i		i		i
948A:						
Billyboy	Fair		Fair		Fair	
	Low content of	0.12	: -	0.14	: -	0.14
	organic matter		saturated zone	ļ	saturated zone	
	Too acid	0.68			!	0.68
	Water erosion	0.99	 		(rock fragments)	
970C:			 		 	1
Keweenaw	Fair	i	Good	i	Fair	i
į	Low content of	0.12		i	Slope	0.63
	organic matter	į	İ	į	Rock fragments	0.88
	Too acid	0.68	[		[	
_				ļ		
Pence			Good		Poor	
	Too sandy Low content of	0.00	 		Too sandy Rock fragments	0.00
	organic matter	0.12	 	i		0.32
	Droughty	0.26	 	i	(rock fragments)	
	Too acid	0.54		i	Slope	0.63
	İ	İ	İ	į	i -	İ
Greenwood	Not rated		Poor		Not rated	
			Depth to	0.00		
			saturated zone			1
970E:			 		 	1
Keweenaw	  Fair	i	Poor	i	Poor	ì
110110011011	Low content of	0.12	Slope	0.00	Slope	0.00
	organic matter	i		1	Rock fragments	0.88
	Too acid	0.68		į	j	į
Pence			Poor		Poor	
	Too sandy	0.00	Slope	0.00	:	0.00
	Low content of	0.12	  -	1	· -	0.00
	organic matter	0.26	 			0.00
	Droughty Too acid	0.26 0.54	 		Hard to reclaim (rock fragments)	
				i	(100% IIagments)	
Greenwood	Not rated	i	Poor	i	  Not rated	i
	İ	İ	Depth to	0.00		İ
			saturated zone			
		1		1	1	1

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc   reclamation mater		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	<u> </u>	limiting features	<u> </u>
1070C:			  -			
Fremstadt	  Fair	l	  Good	1	  Fair	1
riems cade	Too sandy	0.47	6000		Too sandy	0.47
	Too acid	0.68	 		Rock fragments	0.72
	Low content of	0.92		i	Slope	0.84
	organic matter			į		
Cress	  Fair		  Good		  Fair	
	Low content of	0.12		i	Rock fragments	0.02
	organic matter	i	!	i	Too sandy	0.22
	Too sandy	0.22	!	i	Hard to reclaim	0.32
	Droughty	0.40		i	(rock fragments)	i
	Too acid	0.54	İ	İ	Slope	0.96
		į		į	Too acid	0.98
1070D:	 				 	
Fremstadt	Fair		Fair		Poor	
	Too sandy	0.47	Slope	0.08	Slope	0.00
	Too acid	0.68			Too sandy	0.47
	Low content of	0.92			Rock fragments	0.72
	organic matter		 			
Cress	  Fair		  Fair		Poor	
	Low content of	0.12	Slope	0.32	Slope	0.00
	organic matter				Rock fragments	0.02
	Too sandy	0.22			Too sandy	0.22
	Droughty	0.40			Hard to reclaim	0.32
	Too acid	0.54			(rock fragments)	
	 		 		Too acid	0.98
1080B:				į	į	į
Spoonerhill			Fair	1	Poor	
	Too sandy	0.00	Depth to	0.53	Hard to reclaim	0.00
	Low content of	0.12	saturated zone		(dense layer)	
	organic matter		 		Too sandy	0.00
	Too acid	0.68	İ		Rock fragments	0.03
	Droughty	10.96	 		Depth to saturated zone	0.55
	 		 		Hard to reclaim	0.98
					(rock fragments)	
Spoonerhill, stony	Poor		  Fair		Poor	
	Too sandy	0.00		0.53	!	0.00
	Low content of	0.12	saturated zone		(dense layer)	1
	organic matter	i	!	i	Too sandy	0.00
	Too acid	0.68		i	Depth to	0.53
	Droughty	0.96	İ	İ	saturated zone	İ
		<u> </u>			Hard to reclaim (rock fragments)	0.98
Cress	  Fair		  Good		  Fair	
Cress	Low content of	0.12		İ	Rock fragments	0.02
			ı	1		10 22
	organic matter				Too sandy	0.22
	organic matter	0.22	 		Too sandy   Hard to reclaim	0.32
	-	  0.22  0.40	   	   		0.32

Table 20b.--Construction Materials--Continued

Map symbol and soil name	   Potential as sourc   reclamation mater 		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
1653C: Stanberry	Pair		    Fair		Poor	
Scamerry	Too acid  Droughty	0.54  0.94 	Depth to	  0.53         	!	0.00    0.53    0.96  0.98
Parkfalls	  Fair   Low content of   organic matter   Droughty   Too acid	  0.12    0.39  0.68	  Poor   Depth to   saturated zone   	  0.00     	Poor	  0.00    0.00    0.88
Wozny	Fair   Low content of   organic matter   Too acid   Water erosion	  0.88    0.88  0.90   	Poor   Depth to   saturated zone   	  0.00         	saturated zone	  0.00    0.92    0.97  0.97
2015: Pits	    Not rated 		    Not rated 		    Not rated 	
2050: Landfill	  Not rated 		  Not rated 	 	    Not rated 	
3011A: Barronett	Fair   Low content of   organic matter   Too acid   Water erosion	  0.12    0.68  0.90	   Poor   Depth to   saturated zone	    0.00   	  Poor   Depth to   saturated zone	    0.00   
3125A:					 	
Meehan	Poor   Too sandy   Wind erosion   Droughty   Low content of   organic matter   Too acid	  0.00  0.00  0.06  0.12 	-	  0.00       	Poor   Too sandy   Depth to   saturated zone   Too acid	  0.00  0.00    0.88
3126A: Wurtsmith	Poor   Too sandy   Wind erosion   Low content of organic matter   Droughty   Too acid	    0.00  0.00  0.12    0.15  0.50	  Fair   Depth to   saturated zone   	    0.53       	  Poor   Too sandy   Depth to   saturated zone   Too acid   Rock fragments	    0.00  0.53    0.76  0.97

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc   reclamation mater		Potential as sou of roadfill	ırce	Potential as sour of topsoil	ce
	Rating class and	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
3276A:	 		 		 	
Au Gres	Poor		Poor		Poor	
	Too sandy	0.00	Depth to	0.00		0.00
	Wind erosion	0.00	saturated zone		Depth to	0.00
	Low content of	0.12			saturated zone	
	organic matter			ļ	Too acid	0.99
	Too acid Droughty	0.50			 	
3312B:	 		 		 	
Glendenning, very						
stony	!	1	Poor	!	Poor	
	Low content of	0.12	Depth to	0.00	Hard to reclaim	0.00
	organic matter		saturated zone		(dense layer)	
	Too acid	0.68			Depth to	0.00
	 		İ		saturated zone	0.12
	 		 	i i	Rock fragments Hard to reclaim	0.12
			 		(rock fragments)	
Glendenning	Pair		  Poor	l I	  Poor	
Grendenning	Low content of	0.12	!	0.00	1	0.00
	organic matter	0.12	saturated zone	10.00	(dense layer)	10.00
	Too acid	0.68	sacuraced zone		Depth to	0.00
	100 4014		 	1	saturated zone	
		i		i	Rock fragments	0.12
		i		i	Hard to reclaim	0.98
		į	 	į	rock fragments)	į
3336A:		İ	 			i
Fenander	Fair	i	Poor	i	Poor	i
	Low content of	0.12	Depth to	0.00	Depth to	0.00
	organic matter	į	saturated zone	i	saturated zone	İ
	Too acid	0.99	  -	İ	 	İ
3403A:						į
Loxley	rair   Too acid	0.50	Poor   Depth to	0.00	Poor   Depth to	0.00
	100 acid	10.50	saturated zone	10.00	saturated zone	10.00
	 		sacuraced zone	İ	Content of	0.00
			 	i	organic matter	
		i			Too acid	0.12
	İ	į	İ	i	İ	İ
Beseman	Fair		Poor		Poor	
	Too acid	0.61	Depth to	0.00	Depth to	0.00
	Water erosion	0.90	saturated zone		saturated zone	
	[	[			Content of	0.00
				1	organic matter	
			 	1	Too acid	0.12
Dawson	Poor	1	  Poor	1	  Poor	1
Da49011	Too acid	0.00	'	0.00	•	0.00
	Water erosion	0.00	· -		saturated zone	
					Content of	0.00
				1		
	į	i	İ	ĺ	Too acid	0.12
	  -  -	     	 	   	organic matter	į

Table 20b.--Construction Materials--Continued

Rating class and limiting features  Fair Low content of organic matter Too acid Water erosion  Fair Low content of organic matter Too acid Water erosion	          0.12    0.54  0.99                               	Rating class and limiting features  Poor Depth to saturated zone  Poor Depth to Depth to Saturated zone	0.00	Rating class and   limiting features	Value        0.00    0.88  0.92
Low content of organic matter Too acid Water erosion  Fair Low content of organic matter Too acid	0.54	Depth to   saturated zone                           	0.00             	Hard to reclaim (dense layer) Depth to saturated zone Rock fragments Hard to reclaim	0.00
Low content of organic matter Too acid Water erosion  Fair Low content of organic matter Too acid	0.54	Depth to   saturated zone                           	0.00             	Hard to reclaim (dense layer) Depth to saturated zone Rock fragments Hard to reclaim	0.00
Low content of organic matter Too acid Water erosion  Fair Low content of organic matter Too acid	0.54	Depth to   saturated zone                           	0.00             	Hard to reclaim (dense layer) Depth to saturated zone Rock fragments Hard to reclaim	0.00
organic matter Too acid Water erosion  Fair Low content of organic matter Too acid	0.54	saturated zone	             	(dense layer)  Depth to saturated zone Rock fragments Hard to reclaim	0.00
Too acid Water erosion  Fair Low content of organic matter Too acid	0.99	            Poor	!	Depth to saturated zone Rock fragments	0.88
Fair Low content of organic matter Too acid	          0.12    0.68		!	Rock fragments Hard to reclaim	!
Low content of organic matter Too acid	0.68		!	Hard to reclaim	!
Low content of organic matter Too acid	0.68		!	!	0.92   
Low content of organic matter Too acid	0.68		!	(rock fragments)	 
Low content of organic matter Too acid	0.68		!		
Low content of organic matter Too acid	0.68		!	Poor	I
organic matter Too acid	0.68	F	0.00	!	0.00
Too acid	!	saturated zone		saturated zone	
Water erosion	1.	Depth to bedrock	0.58	Rock fragments	0.50
	0.99	· -	İ	Hard to reclaim	0.54
	İ			(dense layer)	ĺ
	[			!	0.92
				(rock fragments)	
  Fair		Poor	l I	Poor	
	1		!	!	0.00
		saturated zone		!	
Too acid	0.54		İ	Depth to	0.00
Water erosion	0.99			saturated zone	İ
			ļ	Too acid	0.98
Not rated	ļ	  Not rated	 	  Not rated	 
Poor		Poor	l I	Poor	 
	!		!		0.00
Low content of	0.12	saturated zone		Depth to	0.00
organic matter	İ			saturated zone	İ
Too acid	0.50			Rock fragments	0.97
Droughty	0.97				
		 	l I	 	l I
Poor	i	Good	İ	Poor	İ
Wind erosion	0.00			Too sandy	0.00
Too sandy	0.00			Too acid	0.99
Low content of	0.12		ļ		
•		 	l I	 	 
Dioughey		 		! 	
	İ	İ	İ	İ	į
Poor	1	Good		Poor	
	1			· -	0.00
· -	1	 			0.96
	U.12	 	I I	100 acid	0.99
Too acid	0.61	! 	İ	 	
Droughty	0.98	İ	İ	İ	į
   Danne				   Danier	
		'		!	
· -	1	-	U.89	· -	0.00
		Datarated Zone	İ	:	0.12
Too acid	0.84		i	saturated zone	
Droughty	0.93		İ	İ	i
	Not rated  Poor Too sandy Low content of organic matter Too acid Droughty  Poor Wind erosion Too sandy Low content of organic matter Too acid Droughty  Poor Wind erosion Too sandy Low content of organic matter Too acid Droughty  Poor Too sandy Low content of organic matter Too acid Droughty  Poor Too sandy Low content of organic matter Too acid Droughty  Poor Too sandy Low content of organic matter Too acid	Low content of organic matter Too acid   0.54 Water erosion   0.99  Not rated	Low content of organic matter   saturated zone   Too acid   0.54   Water erosion   0.99	Low content of organic matter Too acid   0.54   Water erosion   0.99	Low content of organic matter

Table 20b.--Construction Materials--Continued

Map symbol   Potential as source			Potential as source		Potential as source	
and soil name	reclamation mater	ial	of roadfill		of topsoil	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
3629B:	 		 		 	
Perida	Poor	İ	Fair	İ	Poor	İ
	Too sandy	0.00	Shrink-swell	0.99	Too sandy	0.00
	Wind erosion	0.00	ĺ	İ	Too acid	0.99
	Low content of	0.12	ĺ	İ	Ī	ĺ
	organic matter	İ	ĺ	İ	Ī	ĺ
	Too acid	0.61				
M-W:	 		 		 	
Miscellaneous water	Not rated	į	Not rated	į	Not rated	į
W:					 	
Water	Not rated		Not rated		Not rated	

Table 21.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	   Pond reservoir ar 	eas	Embankments, dikes   levees	, and	Aquifer-fed excavated pond	ls
	Rating class and limiting features	Value	Rating class and   limiting features	1	Rating class and   limiting features	Value
3A: Totagatic	  Very limited   Seepage   	    1.00   	  Very limited   Depth to   saturated zone   Ponding   Seepage	    1.00    1.00  0.81	  Very limited   Cutbanks cave   	      1.00   
Bowstring	  Very limited   Seepage     	  1.00     	Very limited   Content of   organic matter   Depth to   saturated zone   Ponding	  1.00    1.00    1.00	  Very limited   Cutbanks cave   	  1.00     
Ausable	  Very limited   Seepage   	  1.00   	  Very limited   Depth to   saturated zone   Ponding   Seepage	  1.00    1.00  0.58	  Very limited   Cutbanks cave   	  1.00 
22A: Comstock	  Somewhat limited   Seepage   	      0.72   	Very limited Depth to saturated zone Piping	      1.00    0.96	  Very limited   Cutbanks cave   Slow refill	  1.00  0.28
24A: Poskin	  Very limited   Seepage   	    1.00   	  Very limited   Depth to   saturated zone   Piping   Seepage	    1.00    1.00  0.50	  Very limited   Cutbanks cave 	    1.00   
27A: Scott Lake	  Very limited   Seepage   	      1.00	  Somewhat limited   Depth to   saturated zone   Seepage	    0.86    0.50	  Very limited   Cutbanks cave   Depth to water	    1.00  0.06
28B: Haugen, very stony	  Somewhat limited   Seepage   	    0.72 	  Very limited   Depth to   saturated zone   Seepage	    0.99    0.04	  Very limited   No ground water 	1.00
Haugen	  Somewhat limited   Seepage   	    0.72   	  Very limited   Depth to   saturated zone   Seepage	  0.99    0.04	  Very limited   No ground water 	  1.00 
Rosholt, very stony	  Very limited   Seepage 	1.00	  Somewhat limited   Seepage 	0.50	  Very limited   No ground water 	    1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir ar	eas	Embankments, dikes, and     levees		Aquifer-fed   excavated ponds		
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value	
28B: Rosholt			  Somewhat limited  Seepage		    Very limited   No ground water		
28C: Haugen, very stony	  Somewhat limited   Seepage 	    0.72 	  Very limited   Depth to   saturated zone   Seepage	    0.99    0.04	  Very limited   No ground water 	    1.00 	
Haugen	  Somewhat limited   Seepage   	    0.72   	   Very limited   Depth to   saturated zone   Seepage	  0.99    0.04	  Very limited   No ground water   	  1.00 	
Rosholt, very stony	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	0.50	  Very limited   No ground water	1.00	
Rosholt	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	0.50	  Very limited   No ground water	1.00	
33B: Chetek	    Very limited   Seepage	1.00	    Somewhat limited   Seepage	      0.50	    Very limited   No ground water	      1.00	
33C: Chetek	    Very limited   Seepage 	1.00	    Somewhat limited   Seepage	0.50	  -  Very limited   No ground water 	1.00	
38A: Rosholt	    Very limited   Seepage 	1.00	    Somewhat limited   Seepage	    0.50	    Very limited   No ground water 	    1.00	
38B: Rosholt	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	    0.50	  Very limited   No ground water	    1.00	
38C: Rosholt	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	    0.50	  Very limited   No ground water	    1.00	
38D: Rosholt	  Very limited   Seepage   Slope	    1.00  0.04	  Somewhat limited   Seepage 	    0.50 	  Very limited   No ground water 	1.00	
42D: Amery	  Somewhat limited   Seepage   Slope	    0.72  0.04	  Somewhat limited   Seepage 	    0.03 	  Very limited   No ground water 	    1.00 	
43B: Antigo	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	    0.50	  Very limited   No ground water 	    1.00	
43C: Antigo	  Very limited   Seepage   Slope	 	  Somewhat limited   Seepage 	    0.50 	  Very limited   No ground water 	    1.00	

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		   Embankments, dikes, and   levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value
43D: Antigo	    Very limited   Seepage   Slope	      1.00  0.21	    Somewhat limited   Seepage 	      0.50	    Very limited   No ground water	
48A: Brill	  Very limited   Seepage   	    1.00   	  Very limited   Depth to   saturated zone   Seepage	    1.00    0.50	  Very limited   No ground water 	1.00
63A: Crystal Lake	  Somewhat limited   Seepage 	    0.72   	  Very limited   Piping   Depth to   saturated zone	    1.00  0.99 	!	  1.00  0.96  0.24
63B: Crystal Lake	  Somewhat limited   Seepage 	    0.72   	  Very limited   Piping   Depth to   saturated zone	    1.00  0.99 	!	  1.00  0.96  0.24
63C: Crystal Lake	  Somewhat limited   Seepage   	    0.72   	  Very limited   Piping   Depth to   saturated zone	    1.00  0.99 	!	  1.00  0.96  0.54
63E: Crystal Lake	  Somewhat limited   Seepage   Slope 	    0.72  0.41 	  Very limited   Piping   Depth to   saturated zone	    1.00  0.86	!	  1.00  0.96  0.96
64A: Totagatic	  Very limited   Seepage   	    1.00   	  Very limited   Depth to   saturated zone   Ponding   Seepage	  1.00    1.00  0.81	  Very limited   Cutbanks cave   	1.00
Winterfield	  Very limited   Seepage   	    1.00   	   Very limited   Depth to   saturated zone   Seepage	  1.00    0.64	   Very limited   Cutbanks cave   	  1.00   
69B:		į	 	į		į
Keweenaw	Very limited   Seepage 	1.00	Somewhat limited   Seepage	0.11	Very limited   No ground water	1.00
Sayner	  Very limited   Seepage	1.00	Somewhat limited   Seepage	0.72	  Very limited   No ground water	1.00
Vilas	  Very limited   Seepage 	    1.00	  Somewhat limited   Seepage 	    0.86	  Very limited   No ground water 	    1.00
69C: Keweenaw	  Very limited   Seepage 	    1.00 	  Somewhat limited   Seepage 	    0.11 	  Very limited   No ground water	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas   		Embankments, dikes	, and	Aquifer-fed   excavated pond	ls
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
69C: Sayner	    Very limited   Seepage	      1.00	    Somewhat limited   Seepage	      0.72	    Very limited   No ground water	      1.00
Vilas	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	    0.86	  Very limited   No ground water	1.00
69E: Keweenaw	  Very limited   Seepage   Slope	    1.00  0.50	  Somewhat limited   Seepage	    0.11	  Very limited   No ground water	1.00
Sayner	  Very limited   Seepage   Slope	  1.00  0.50	  Somewhat limited   Seepage 	    0.72 	  Very limited   No ground water   	    1.00 
Vilas	  Very limited   Seepage   Slope	  1.00  0.50	  Somewhat limited   Seepage 	  0.86 	  Very limited   No ground water   	1.00
74B: Vilas	  Very limited   Seepage 	1.00	  Somewhat limited   Seepage	    0.86	  Very limited   No ground water 	1.00
74C: Vilas	  Very limited   Seepage   Slope	  1.00  0.01	  Somewhat limited   Seepage	    0.86 	  Very limited   No ground water 	1.00
74D: Vilas	  Very limited   Seepage   Slope	    1.00  0.21	  Somewhat limited   Seepage	      0.86	  Very limited   No ground water	1.00
100B: Menahga	  Very limited   Seepage 	      1.00	  Somewhat limited   Seepage	      0.64	  Very limited   No ground water 	    1.00
100C: Menahga	  Very limited   Seepage 	    1.00	  Somewhat limited   Seepage 	    0.64 	  Very limited   No ground water 	    1.00
100D: Menahga	  Very limited   Seepage   Slope	    1.00  0.15	  Somewhat limited   Seepage 	    0.64 	  Very limited   No ground water 	1.00
127D: Amery	  Somewhat limited   Seepage   Slope	  0.72  0.04	  Somewhat limited   Seepage 	    0.03 	  Very limited   No ground water   	    1.00 
Rosholt	  Very limited   Seepage   Slope	  1.00  0.04	  Somewhat limited   Seepage 	  0.50   	  Very limited   No ground water   	1.00
127E: Amery	  Somewhat limited   Seepage   Slope	  0.72  0.64	  Somewhat limited   Seepage	0.03	  Very limited   No ground water	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	   Pond reservoir ar 	eas	Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
127E: Rosholt	    Very limited   Seepage   Slope	    1.00  0.64	    Somewhat limited   Seepage 	      0.50	    Very limited   No ground water 	      1.00
15CD.			l			
156B: Magnor, very stony	  Somewhat limited   Seepage 	  0.72 	  Very limited   Depth to   saturated zone   Piping	  1.00    1.00	  Very limited   No ground water 	1.00
	   		Figing   Thin layer   Seepage	0.37	 	
Magnor	Somewhat limited   Seepage    -  -	  0.72     	Very limited   Depth to   saturated zone   Piping   Thin layer   Seepage	  1.00    1.00  0.37  0.04	   Very limited   No ground water     	  1.00   
157B:	 		 		l	
Freeon, very stony	  Somewhat limited   Seepage   	  0.02   	   Very limited   Depth to   saturated zone   Piping   Thin layer	  1.00    1.00  0.37	  Very limited   No ground water   	1.00
Freeon	  Somewhat limited   Seepage   	      0.02     	Seepage 	0.04    1.00  1.00  0.37  0.04	  Very limited   No ground water   	1.00
157C: Freeon, very stony	  Somewhat limited   Seepage   	    0.02     	   Very limited   Depth to   saturated zone   Piping   Thin layer   Seepage	  1.00    1.00  0.37  0.04	  Very limited   No ground water   	1.00
Freeon	  Somewhat limited   Seepage   	    0.02     	  Very limited   Depth to   saturated zone   Piping   Thin layer   Seepage	  1.00    1.00  0.37  0.04	  Very limited   No ground water   	  1.00   
160A: Oesterle	    Very limited   Seepage   	      1.00   	Very limited Depth to saturated zone Seepage	    1.00    0.50	  Very limited   Cutbanks cave   	    1.00 
182B: Padus	  Very limited   Seepage 	1.00	  Somewhat limited   Seepage	0.50	  Very limited   No ground water	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		   Embankments, dikes   levees	, and	Aquifer-fed excavated pond	ls
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
182C: Padus	    Very limited   Seepage   Slope	    1.00  0.01	  Somewhat limited   Seepage	      0.50	    Very limited   No ground water	      1.00
192A: Worcester	  Very limited   Seepage   	    1.00   	  Very limited   Depth to   saturated zone   Seepage	    1.00    0.50	  Very limited   Cutbanks cave   	    1.00 
193A: Minocqua	  Very limited   Seepage   	    1.00     	   Very limited   Depth to   saturated zone   Ponding   Seepage	  1.00    1.00  0.50	  Very limited   Cutbanks cave   	1.00
215B: Pence	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	0.50	  Very limited   No ground water	    1.00
215C: Pence	  Very limited   Seepage   Slope	  1.00  0.01	  Somewhat limited   Seepage 	    0.50 	  Very limited   No ground water 	1.00
215D: Pence	  Very limited   Seepage   Slope	  1.00  0.21	  Somewhat limited   Seepage	    0.50	  Very limited   No ground water	1.00
315A: Rib	  Very limited   Seepage     	    1.00     	   Very limited   Depth to   saturated zone   Piping   Ponding   Seepage	    1.00    1.00  1.00	  Very limited   Cutbanks cave     	    1.00     
337A: Plover	  Somewhat limited   Seepage   	    0.72   	  Very limited   Depth to   saturated zone   Piping	    1.00    1.00	  Very limited   Cutbanks cave   Slow refill 	  1.00  0.28
368B: Mahtomedi	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	0.64	  Very limited   No ground water	1.00
Cress	  Very limited   Seepage 	1.00	  Somewhat limited   Seepage 	    0.50	  Very limited   No ground water 	    1.00
368C: Mahtomedi	  Very limited   Seepage	1.00	  Somewhat limited   Seepage 	0.64	  Very limited   No ground water	    1.00
Cress	  Very limited   Seepage 	1.00	  Somewhat limited   Seepage 	0.50	  Very limited   No ground water 	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and   levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
368D: Mahtomedi	  Very limited   Seepage   Slope	      1.00  0.12	    Somewhat limited   Seepage 	      0.64	  Very limited   No ground water	1.00
Cress	  Very limited   Seepage   Slope	  1.00  0.12	  Somewhat limited   Seepage 	    0.50 	  Very limited   No ground water 	1.00
371A: Croswell	  Very limited   Seepage   	    1.00   	  Very limited   Depth to   saturated zone   Seepage	    0.99    0.86	  Very limited   Cutbanks cave   Depth to water 	  1.00  0.01
380B: Cress	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	0.50	  Very limited   No ground water	1.00
Rosholt	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	0.50	  Very limited   No ground water	1.00
380C: Cress	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	      0.50	    Very limited   No ground water	1.00
Rosholt	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	0.50	  Very limited   No ground water	1.00
380D: Cress	  Very limited   Seepage   Slope	    1.00  0.15	  Somewhat limited   Seepage 	      0.50	  Very limited   No ground water	1.00
Rosholt	  Very limited   Seepage   Slope 	  1.00  0.15	  Somewhat limited   Seepage   	    0.50 	  Very limited   No ground water   	1.00
383B: Mahtomedi	  Very limited   Seepage 	1.00	  Somewhat limited   Seepage	    0.64	  Very limited   No ground water	1.00
383C: Mahtomedi	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	    0.64	  Very limited   No ground water	1.00
383D: Mahtomedi	  Very limited   Seepage   Slope	      1.00  0.15	  Somewhat limited   Seepage 	      0.64 	  Very limited   No ground water 	1.00
396B: Friendship	  Very limited   Seepage 	    1.00 	  Somewhat limited   Seepage 	    0.86	  Very limited   Cutbanks cave   Depth to water	1.00
Wurtsmith	  Very limited   Seepage   	  1.00   	   Very limited   Depth to   saturated zone   Seepage	  0.99    0.82	  Very limited   Cutbanks cave   Depth to water 	  1.00  0.01 

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir ar	eas	Embankments, dikes   levees	, and	Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
396B: Grayling	    Very limited   Seepage 	      1.00	    Somewhat limited   Seepage 	      0.64	    Very limited   No ground water 	1.00
397A: Perchlake	  Very limited   Seepage   	    1.00   	  Very limited   Depth to   saturated zone   Seepage	    1.00    0.64	  Very limited   Cutbanks cave   	1.00
399B: Grayling	  Very limited   Seepage	1.00	    Somewhat limited   Seepage 	      0.64	  Very limited   No ground water	1.00
399C: Grayling	  Very limited   Seepage 	1.00	  Somewhat limited   Seepage 	    0.64	  Very limited   No ground water 	1.00
399D: Grayling	  Very limited   Seepage   Slope	    1.00  0.15	  Somewhat limited   Seepage	    0.64 	  Very limited   No ground water	1.00
405A: Lupton	  Very limited   Seepage	1.00	    Not rated 		  Somewhat limited   Cutbanks cave	0.10
Cathro	  Very limited   Seepage   	  1.00     	  Very limited   Depth to   saturated zone   Ponding   Seepage	  1.00    1.00  0.03	  Somewhat limited   Cutbanks cave   	  0.10   
Tawas	   Very limited   Seepage   	    1.00     	Very limited	  1.00    1.00  0.20	  Very limited   Cutbanks cave   	  1.00     
406A: Loxley	  Very limited   Seepage   	    1.00         	Very limited   Content of   organic matter   Depth to   saturated zone   Piping   Ponding	  1.00    1.00    1.00  1.00	  Somewhat limited   Cutbanks cave     	  0.10       
407A: Seelyeville	  Very limited   Seepage   	    1.00       	   Very limited   Content of   organic matter   Depth to   saturated zone   Piping   Ponding	  1.00    1.00    1.00	  Somewhat limited   Cutbanks cave     	  0.10     

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
407A: Markey	  Very limited   Seepage   	      1.00     	Very limited Depth to saturated zone Ponding Seepage	    1.00    1.00  0.64	  Very limited   Cutbanks cave   	    1.00   
410A: Seelyeville	  Very limited   Seepage     	    1.00       	Very limited   Content of   organic matter   Depth to   saturated zone   Piping   Ponding	  1.00    1.00    1.00	  Somewhat limited   Cutbanks cave   	0.10
Cathro	  Very limited   Seepage   	    1.00     	   Very limited   Depth to   saturated zone   Ponding   Seepage	  1.00    1.00  0.03	  Somewhat limited   Cutbanks cave   	  0.10     
412A: Rifle	    Very limited   Seepage	1.00	    Not rated 		  Somewhat limited   Cutbanks cave	0.10
Tacoosh	  Very limited   Seepage       	  1.00       	Very limited   Content of   organic matter   Depth to   saturated zone   Ponding   Seepage	  1.00    1.00    1.00  0.03	  Somewhat limited   Cutbanks cave     	  0.10     
415A: Greenwood	    Very limited   Seepage 	      1.00	    Not rated   	     	    Somewhat limited   Cutbanks cave 	    0.10
439B: Graycalm	  Very limited   Seepage	    1.00	  Somewhat limited   Seepage	    0.64	  Very limited   No ground water	    1.00
Menahga	  Very limited   Seepage 	1.00	  Somewhat limited   Seepage 	0.64	  Very limited   No ground water 	1.00
439C: Graycalm	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	0.64	  Very limited   No ground water	1.00
Menahga	  Very limited   Seepage 	1.00	  Somewhat limited   Seepage 	0.64	  Very limited   No ground water 	1.00
439D: Graycalm	  Very limited   Seepage   Slope	    1.00  0.15	  Somewhat limited   Seepage 	    0.64 	  Very limited   No ground water 	1.00
Menahga	  Very limited   Seepage   Slope 	  1.00  0.15	  Somewhat limited   Seepage   	    0.64 	  Very limited   No ground water   	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir ar	eas	   Embankments, dikes   levees	, and	Aquifer-fed excavated pond	ls
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
441C: Freeon	    Somewhat limited   Seepage   Slope 	    0.02  0.01 	Very limited Depth to saturated zone Piping Thin layer Seepage	    1.00    1.00  0.37  0.04	  Very limited   No ground water   	      1.00     
Cathro	  Very limited   Seepage	1.00	  Not rated 		  Somewhat limited   Cutbanks cave	    0.10
442C: Haugen	  Somewhat limited   Seepage 	    0.72 	  Very limited   Depth to   saturated zone   Seepage	    0.99    0.04	  Very limited   No ground water 	    1.00
Greenwood	  Very limited   Seepage     	  1.00       	Very limited   Content of   organic matter   Depth to   saturated zone   Piping   Ponding	  1.00    1.00    1.00  1.00	  Somewhat limited   Cutbanks cave     	  0.10         
443D: Amery	  Somewhat limited   Seepage   Slope	0.72	  Somewhat limited   Seepage	0.03	  Very limited   No ground water	1.00
Greenwood	  Very limited   Seepage       	  1.00       		  1.00    1.00    1.00	  Somewhat limited   Cutbanks cave     	  0.10         
461A: Bowstring	  Very limited   Seepage   	  1.00     	Very limited   Content of   organic matter   Depth to   saturated zone   Ponding	  1.00    1.00    1.00	  Very limited   Cutbanks cave   	  1.00       
484A: Greenwood	  Very limited   Seepage   	  1.00     	Very limited   Content of   organic matter   Depth to   saturated zone   Piping   Ponding	  1.00    1.00    1.00	  Somewhat limited   Cutbanks cave     	    0.10       
Beseman	  Very limited   Seepage     	  1.00       		  1.00    1.00    1.00	  Somewhat limited   Cutbanks cave     	  0.10       

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		   Embankments, dikes   levees	Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and	Value	Rating class and   limiting features	Value	Rating class and limiting features	Value	
495B: Karlsborg	  Very limited   Seepage 	      1.00 	   Very limited   Depth to   saturated zone   Seepage	      1.00    0.72	     Very limited   No ground water	1.00	
Grettum	  Very limited   Seepage 	1.00	  Somewhat limited   Seepage 	    0.58 	  Very limited   Cutbanks cave   Depth to water	  1.00  0.96	
Perida	  Very limited   Seepage   	    1.00   	  Somewhat limited   Seepage   Depth to   saturated zone	    0.72  0.09 	  Very limited   No ground water   	1.00	
495C: Karlsborg	  Very limited   Seepage 	    1.00 	  Very limited   Depth to   saturated zone   Seepage	    1.00    0.72	  Very limited   No ground water 	1.00	
Grettum	  Very limited   Seepage 	    1.00	  Somewhat limited   Seepage 	    0.58 	  Very limited   Cutbanks cave   Depth to water	  1.00  0.96	
Perida	  Very limited   Seepage   	    1.00   	Somewhat limited   Seepage   Depth to   saturated zone	    0.72  0.09 	  Very limited   No ground water   	1.00	
495D:	 		 		 	1	
Karlsborg	Very limited   Seepage   Slope	  1.00  0.15	Very limited Depth to saturated zone Seepage	  1.00    0.72	Very limited No ground water	1.00	
Grettum	  Very limited   Seepage   Slope	  1.00  0.15	  Somewhat limited   Seepage 	    0.58 	  Very limited   Cutbanks cave   Depth to water	  1.00  0.96	
Perida	  Very limited   Seepage   Slope	  1.00  0.15 	  Somewhat limited   Seepage   Depth to   saturated zone	    0.72  0.09 	  Very limited   No ground water	1.00	
497A: Meenon	  Very limited   Seepage 	    1.00   	  Very limited   Depth to   saturated zone   Seepage	    1.00    0.72	  Very limited   No ground water 	1.00	
515A: Manitowish	  Very limited   Seepage   	    1.00   	  Somewhat limited   Depth to   saturated zone   Seepage	  0.86    0.50	   Very limited   Cutbanks cave   Depth to water	  1.00  0.06	

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir ar 	eas	Embankments, dikes   levees	, and	Aquifer-fed excavated pond	ls
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
521A: Dody	    Very limited   Seepage   	      1.00   	   Very limited   Depth to   saturated zone   Ponding   Seepage	    1.00    1.00  0.13	Very limited No ground water	    1.00   
524E: Rock outcrop	    Somewhat limited   Slope	0.21	    Not rated 	   	    Not rated 	 
Frogcreek	  Somewhat limited   Seepage   	  0.04   	Very limited Depth to saturated zone Thin layer Seepage	  1.00    0.11  0.09	  Very limited   No ground water   	  1.00   
Metonga	  Very limited   Seepage   Depth to bedrock   Slope	1.00	  Very limited   Piping   Thin layer   Seepage	  1.00  0.85  0.04	  Very limited   No ground water   	  1.00   
542B: Haugen, very stony	  Somewhat limited   Seepage 	    0.72 	  Very limited   Depth to   saturated zone   Seepage	    0.99    0.04	  Very limited   No ground water 	    1.00 
Haugen	  Somewhat limited   Seepage 	    0.72   	   Very limited   Depth to   saturated zone   Seepage	  0.99    0.04	  Very limited   No ground water   	  1.00 
542C: Haugen, very stony	  Somewhat limited   Seepage 	    0.72 	  Very limited   Depth to   saturated zone   Seepage	    0.99    0.04	  Very limited   No ground water 	1.00
Haugen	  Somewhat limited   Seepage   	    0.72   	  Very limited   Depth to   saturated zone   Seepage	  0.99    0.04	  Very limited   No ground water   	  1.00   
543B: Anigon	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	    0.50	  Very limited   No ground water	1.00
543C2: Anigon	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	    0.50	  Very limited   No ground water	1.00
544F: Menahga	  Very limited   Seepage   Slope	    1.00  0.82	  Somewhat limited   Seepage	      0.64	  Very limited   No ground water 	    1.00
Mahtomedi	  Very limited   Seepage   Slope	1.00	  Somewhat limited   Seepage 	    0.64 	  Very limited   No ground water 	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	   Pond reservoir ar   	eas	Embankments, dikes, and   levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
555A: Fordum	  Very limited   Seepage   	      1.00     	  Very limited   Depth to   saturated zone   Ponding   Seepage	    1.00    1.00  0.53	  Very limited   Cutbanks cave   	    1.00   
574B: Sayner	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	0.72	  Very limited   No ground water	1.00
574C: Sayner	  Very limited   Seepage   Slope	      1.00  0.01	  Somewhat limited   Seepage	      0.72 	  Very limited   No ground water	1.00
574E: Sayner	  Very limited   Seepage   Slope	    1.00  0.50	  Somewhat limited   Seepage	      0.72	  Very limited   No ground water	1.00
579B: Parkfalls	  Somewhat limited   Seepage   	    0.04   	   Very limited   Depth to   saturated zone   Thin layer   Seepage	 	  Very limited   No ground water   	 
600A: Haplosaprists	    Not limited 	     	    Not rated 	     	    Not rated 	
Psammaquents	Not limited	j I	Not rated	j I	Not rated	İ
615B: Cress	  Very limited   Seepage	    1.00	  Somewhat limited   Seepage	    0.50	  Very limited   No ground water	1.00
615C: Cress	    Very limited   Seepage 	1.00	    Somewhat limited   Seepage 	      0.50	    Very limited   No ground water	1.00
615D: Cress	  Very limited   Seepage   Slope	    1.00  0.15	  Somewhat limited   Seepage	    0.50	  Very limited   No ground water	1.00
623A: Capitola	  Somewhat limited   Seepage     	    0.72       	   Very limited   Depth to   saturated zone   Piping   Ponding   Thin layer   Seepage	   1.00   1.00   1.00   0.86   0.04	  Very limited   No ground water   	  1.00         
624A: Ossmer	  Very limited   Seepage   	    1.00   	  Very limited   Depth to   saturated zone   Seepage	    1.00    0.50	  Very limited   Cutbanks cave   	    1.00   

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes	Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and	Value	Rating class and	Value	Rating class and	Value	
	limiting features		limiting features	<u> </u>	limiting features	1	
632A: Aftad	  Somewhat limited   Seepage 	0.72	  Very limited   Piping   Depth to   saturated zone	      1.00  0.99	  Very limited   Cutbanks cave   Slow refill   Depth to water	    1.00  0.28  0.24	
632B: Aftad	  Somewhat limited   Seepage 	0.72	  Very limited   Piping   Depth to   saturated zone	      1.00  0.99	  Very limited   Cutbanks cave   Slow refill   Depth to water	    1.00  0.28  0.24	
632C: Aftad	  Somewhat limited   Seepage 	    0.72   	  Very limited   Piping   Depth to   saturated zone	      1.00  0.99 	  Very limited   Cutbanks cave   Slow refill   Depth to water	    1.00  0.96  0.54	
633F: Pence	  Very limited   Seepage   Slope	1.00	  Somewhat limited   Seepage	    0.50	  Very limited   No ground water	1.00	
Padus	  Very limited   Seepage   Slope	  1.00  0.82	  Somewhat limited   Seepage 	    0.50 	  Very limited   No ground water   	  1.00 	
648B: Sconsin	  Very limited   Seepage   	  1.00     	Very limited  Depth to saturated zone Piping Thin layer Seepage	  1.00    1.00  0.88  0.01	  Very limited   No ground water   	1.00	
670C: Keweenaw	  Very limited   Seepage   Slope	1.00	  Somewhat limited   Seepage	      0.11	  Very limited   No ground water	    1.00	
Pence	  Very limited   Seepage   Slope 	  1.00  0.01	  Somewhat limited   Seepage 	    0.50 	  Very limited   No ground water   	  1.00 	
670E: Keweenaw	  Very limited   Seepage   Slope	1.00	  Somewhat limited   Seepage	    0.11 	  Very limited   No ground water 	1.00	
Pence	  Very limited   Seepage   Slope 	  1.00  0.50	  Somewhat limited   Seepage 	    0.50   	  Very limited   No ground water   	  1.00 	
671B: Spoonerhill, stony	  Somewhat limited   Seepage 	0.72	Very limited Depth to saturated zone Seepage	    0.99    0.11	  Very limited   No ground water   	    1.00 	

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir ar   	eas	Embankments, dikes   levees	, and	Aquifer-fed excavated pond	ls
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u>i</u>	limiting features	<u> </u>	limiting features	<u>i</u>
671B: Spoonerhill	  Somewhat limited   Seepage 	    0.72 	  Very limited   Depth to   saturated zone   Seepage	      0.99    0.11	  Very limited   No ground water	    1.00
680B:	 		 	 	 	
Stanberry, stony	Somewhat limited   Seepage   	0.04	Very limited   Depth to   saturated zone   Thin layer   Seepage	  0.99    0.37  0.07	Very limited No ground water	1.00
Pence, stony	  Very limited   Seepage 	1.00	  Somewhat limited   Seepage	    0.50	  Very limited   No ground water	1.00
683A: Tipler	  Very limited   Seepage	1.00	  Somewhat limited   Depth to   saturated zone   Seepage	    0.86    0.50	  Very limited   Cutbanks cave   Depth to water	1.00
	 		beepage 			
706A: Winterfield	  Very limited   Seepage   	    1.00 	  Very limited   Depth to   saturated zone   Seepage	    1.00    0.64	  Very limited   Cutbanks cave 	    1.00 
Totagatic	  Very limited   Seepage   	  1.00 	  Very limited	  1.00    1.00  0.81	  Very limited   Cutbanks cave   	1.00
724A:	 		 		 	
	Very limited   Seepage	1.00	Very limited   Depth to   saturated zone   Piping   Ponding   Seepage	  1.00    1.00  1.00  0.50	Very limited Cutbanks cave	1.00
Rock outcrop	  Not rated 	   	  Not rated 	   	  Not rated 	
726B: Sissabagama	  Very limited   Seepage 	1.00	  Somewhat limited   Depth to   saturated zone   Seepage	    0.86    0.36	   Very limited   Cutbanks cave   Depth to water	  1.00  0.24
733A: Wozny	  Somewhat limited   Seepage     	    0.72     	  Very limited   Depth to   saturated zone   Piping   Ponding   Thin layer   Seepage	    1.00    1.00  1.00  0.11  0.09	  Very limited   No ground water   	  1.00     

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas   		Embankments, dikes   levees	, and	Aquifer-fed excavated ponds	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	<u> </u>	limiting features	1
771A:	 		 		 	
Lenroot	Very limited	į	Very limited	İ	Very limited	j
	Seepage	1.00	· -	0.99	!	1.00
	 		saturated zone Seepage	0.54	Depth to water	0.01
						i
827A: Scoba	  Very limited		  Very limited		  Very limited	
BCODa	Seepage	1.00		0.99		1.00
			saturated zone		Depth to water	0.01
			Seepage	0.50		1
853C:	 		 		 	
Frogcreek		:	Very limited	İ	Very limited	
	Seepage	0.04	· -	1.00	No ground water	1.00
			saturated zone Thin layer	0.11	 	l
			Seepage	0.09		
Stinnett			  Very limited		  Very limited	
Scimecc	Seepage	0.72		1.00	: -	1.00
		j	saturated zone	į	İ	j
		]	Piping	1.00	[	
			Thin layer Seepage	0.11	 	
			beepage			
Wozny			Very limited		Very limited	
	Seepage	0.72	Depth to saturated zone	1.00	No ground water	1.00
			Piping	1.00		
	İ	į	Ponding	1.00	į	j
			Thin layer	0.11		
			Seepage 	0.09	 	
856B:	į	į		į	į	į
Stinnett		0.72	Very limited	:	Very limited	1.00
	Seepage	0.72	Depth to saturated zone	1.00	No ground water	1
		i	Piping	1.00		j
			Thin layer	0.11	[	
			Seepage	0.09	 	
857B:				İ		i
Frogcreek	:		Very limited		Very limited	
	Seepage	0.04	Depth to saturated zone	1.00	No ground water	1.00
			Thin layer	0.11	 	
	į	į	Seepage	0.09	į	į
857C:			 		 	1
Frogcreek	Somewhat limited	İ	  Very limited	İ	  Very limited	ĺ
	Seepage	0.04	Depth to	1.00	No ground water	1.00
			saturated zone Thin layer	0 11	 	1
			Thin layer   Seepage	0.11	 	1
	i	i			İ	í

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes   levees	, and	Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value
873B: Stanberry	  Somewhat limited   Seepage   	      0.04   	  Very limited   Depth to   saturated zone   Thin layer   Seepage	    0.99    0.37  0.07	  Very limited   No ground water   	    1.00   
873C: Stanberry	  Somewhat limited   Seepage   Slope 	    0.04  0.01 	  Very limited   Depth to   saturated zone   Thin layer   Seepage	    0.99    0.37  0.07	    Very limited   No ground water   	1.00
873D: Stanberry	  Somewhat limited   Slope   Seepage 	    0.21  0.04 	  Very limited   Depth to   saturated zone   Thin layer   Seepage	    0.99    0.37  0.07	    Very limited   No ground water   	1.00
905A: Cublake	  Very limited   Seepage 	      1.00   	  Somewhat limited   Depth to   saturated zone   Seepage	    0.86    0.08	  Very limited   Cutbanks cave   Depth to water	    1.00  0.24
926A: Flink	  Very limited   Seepage	    1.00   	  Very limited   Depth to   saturated zone   Seepage	    1.00    0.75	  Very limited   No ground water	1.00
943D: Stanberry	  Somewhat limited   Slope   Seepage 	0.08	  Very limited   Depth to   saturated zone   Thin layer   Seepage	0.99	  Very limited   No ground water   	    1.00   
Greenwood	  Somewhat limited   Seepage	0.72	  Not rated 		  Somewhat limited   Cutbanks cave	0.10
948A: Billyboy	  Very limited   Seepage   	    1.00   	  Very limited   Depth to   saturated zone   Seepage	    1.00    0.50	  Very limited   Cutbanks cave 	    1.00 
970C: Keweenaw	  Very limited   Seepage   Slope	  -  1.00  0.01	  Somewhat limited   Seepage	    0.11	  Very limited   No ground water	1.00
Pence	  Very limited   Seepage   Slope	  1.00  0.01	  Somewhat limited   Seepage 	    0.50	  Very limited   No ground water	    1.00
Greenwood	  Very limited   Seepage 	    1.00	  Not rated   	     	  Somewhat limited   Cutbanks cave 	    0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes   levees	, and	Aquifer-fed excavated ponds		
	Rating class and   limiting features	Value	Rating class and   limiting features	Value	Rating class and   limiting features	Value	
970E: Keweenaw	    Very limited   Seepage   Slope	      1.00  0.50	    Somewhat limited   Seepage 	      0.11	    Very limited   No ground water 	      1.00	
Pence	  Very limited   Seepage   Slope	  1.00  0.50	  Somewhat limited   Seepage 	    0.50 	  Very limited   No ground water	    1.00	
Greenwood	  Very limited   Seepage	1.00	  Not rated 	   	  Somewhat limited   Cutbanks cave	0.10	
1070C: Fremstadt	    Very limited   Seepage		    Somewhat limited   Seepage	      0.07	    Very limited   No ground water		
Cress	  Very limited   Seepage	1.00	  Somewhat limited   Seepage	0.50	  Very limited   No ground water	1.00	
1070D: Fremstadt	  Very limited   Seepage   Slope	    1.00  0.21	  Somewhat limited   Seepage 	      0.07	  Very limited   No ground water	      1.00	
Cress	  Very limited   Seepage   Slope	  1.00  0.15	  Somewhat limited   Seepage 	    0.50 	  Very limited   No ground water 	    1.00	
1080B: Spoonerhill	    Somewhat limited   Seepage   	      0.72 	  Very limited   Depth to   saturated zone   Seepage	      0.99    0.10	    Very limited   No ground water   	      1.00	
Spoonerhill, stony	  Somewhat limited   Seepage   	    0.72   	   Very limited   Depth to   saturated zone   Seepage	    0.99    0.11	  Very limited   No ground water   	  1.00 	
Cress	  Very limited   Seepage	1.00	  Somewhat limited   Seepage		  Very limited   No ground water	1.00	
1653C: Stanberry	  Somewhat limited   Seepage   	    0.04   	  Very limited   Depth to   saturated zone   Thin layer   Seepage	0.99	  Very limited   No ground water   	    1.00   	
Parkfalls	  Somewhat limited   Seepage   	  0.04     	   Very limited   Depth to   saturated zone   Thin layer   Seepage	  1.00    0.77  0.07	  Very limited   No ground water   	  1.00   	

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dike	s, and	Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and   limiting features	Value
1653C: Wozny	    Somewhat limited   Seepage       	    0.72         	Very limited Depth to saturated zone Piping Ponding Thin layer Seepage	    1.00    1.00  1.00  0.11  0.09	  Very limited   No ground water   	    1.00       
2015: Pits	  Not rated 	 	  Not rated 		  Not rated 	   
2050: Landfill	    Not rated	 	    Not rated		  Not rated	
3011A: Barronett	  Somewhat limited   Seepage   	    0.72     	  Very limited   Depth to   saturated zone   Piping   Ponding	  1.00    1.00  1.00	  Very limited   Cutbanks cave   Slow refill 	  1.00  0.28 
3125A: Meehan	  Very limited   Seepage   	    1.00   	  Very limited   Depth to   saturated zone   Seepage	  1.00    0.82	  Very limited   Cutbanks cave   	1.00
3126A: Wurtsmith	  Very limited   Seepage 	    1.00 	  Very limited   Depth to   saturated zone   Seepage	0.99	  Very limited   Cutbanks cave   Depth to water	  1.00  0.01
3276A: Au Gres	  Very limited   Seepage 	    1.00 	  Very limited   Depth to   saturated zone   Seepage	1.00	  Very limited   Cutbanks cave 	1.00
3312B: Glendenning, very stony	    Somewhat limited   Seepage   	        0.72	Very limited Depth to saturated zone Seepage	      1.00    0.04	  -  Very limited   No ground water  -	      1.00
Glendenning	  Somewhat limited   Seepage   	  0.72   	  Very limited   Depth to   saturated zone   Seepage	  1.00    0.04	  Very limited   No ground water   	  1.00 
3336A: Fenander	  Somewhat limited   Seepage 	    0.72   	  Very limited   Depth to   saturated zone   Ponding	  1.00    1.00	  Very limited   Cutbanks cave   Slow refill 	    1.00  0.28

Table 21.--Water Management--Continued

Map symbol Pond reservoir areas and soil name		   Embankments, dikes   levees	, and	Aquifer-fed excavated ponds		
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3403A: Loxley	    Very limited   Seepage 	      1.00 	Very limited Content of organic matter Depth to	      1.00 	    Somewhat limited   Cutbanks cave 	      0.10 
	 		saturated zone Piping Ponding	  1.00  1.00	 	
Beseman	Very limited   Seepage  -  -	  1.00       	Very limited Content of organic matter Depth to saturated zone Piping Ponding	  1.00    1.00    1.00	Somewhat limited   Cutbanks cave     	  0.10     
Dawson	  Very limited   Seepage   	  1.00       	Very limited  Content of  organic matter  Depth to  saturated zone  Ponding  Seepage	į	  Very limited   Cutbanks cave     	    1.00       
3424C: Frogcreek	    Somewhat limited	   	    Very limited	   	    Very limited	   
•	Seepage   	0.04		1.00    0.11  0.09	: -	1.00   
Magroc	  Very limited   Seepage   Depth to bedrock 	  1.00  0.10 	  Very limited   Depth to   saturated zone   Thin layer   Seepage	  1.00    0.11  0.10	  Very limited   No ground water   	  1.00   
Stinnett	  Somewhat limited   Seepage   	  0.72     	Very limited Depth to saturated zone Piping Thin layer Seepage	  1.00    1.00  0.11  0.09	  Very limited   No ground water   	  1.00     
Rock outcrop	  Not limited		  Not rated		  Not rated	
3446A: Newson	  Very limited   Seepage 	    1.00     	   Very limited   Depth to   saturated zone   Ponding   Seepage	  1.00    1.00  0.82	  Very limited   Cutbanks cave   	  1.00   
3448B: Grettum	  Very limited   Seepage 	      1.00 	  Somewhat limited   Seepage 	      0.58 	  Very limited   Cutbanks cave   Depth to water	    1.00  0.96

Table 21.--Water Management--Continued

Map symbol and soil name	   Pond reservoir ar   	eas	   Embankments, dikes   levees 	, and	Aquifer-fed excavated pond	s
	Rating class and	Value		Value	Rating class and	Value
	limiting features	1	limiting features	1	limiting features	<u> </u>
3448C:	 		 	 		
Grettum	Very limited	į	Somewhat limited	į	Very limited	į
	Seepage	1.00	Seepage	0.58	Cutbanks cave	1.00
					Depth to water	0.96
3516A:	 	 	 	 	 	 
Slimlake	  Very limited	i	Somewhat limited	İ	  Very limited	ì
	Seepage	1.00	Depth to	0.86	Cutbanks cave	1.00
		į	saturated zone	į	Depth to water	0.06
			Seepage	0.79		
3629B:	 	 	 	 	 	
Perida	  Verv limited	i	  Somewhat limited		  Very limited	i
	Seepage	1.00	Seepage	0.72	No ground water	1.00
	İ	i	Depth to	0.09		İ
			saturated zone	ĺ		İ
M-W:	 	 	 	 	 	
Miscellaneous water	  Not rated		  Not rated		  Not rated	
	İ	İ		İ	İ	İ
W:						
Water	Not rated		Not rated	ļ	Not rated	ļ
		<u> </u>				<u> </u>

Table 22a.--Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol	Rapid infiltrati		Slow rate treatment		
and soil name	of wastewater		of wastewater		
	Rating class and	Value	Rating class and	Valu	
	limiting features	<u> </u>	limiting features	i	
3A: Totagatic	  Very limited		  Very limited		
10cagacic	Flooding	1.00	Filtering	1.00	
	Depth to	1.00	capacity		
	saturated zone	İ	Depth to	1.00	
	Ponding	1.00	saturated zone	İ	
			Flooding	1.00	
			Ponding	1.00	
			Too acid	0.77	
Bowstring	  Very limited		  Very limited		
g	Flooding	1.00	Filtering	1.00	
	Depth to	1.00	capacity	i	
	saturated zone	į	Depth to	1.00	
	Ponding	1.00	saturated zone	İ	
	Restricted	0.69	Low adsorption	1.00	
	permeability		Flooding	1.00	
			Ponding	1.00	
Ausable	  Very limited		  Very limited		
	Flooding	1.00	Filtering	1.00	
	Depth to	1.00	capacity	i	
	saturated zone	į	Depth to	1.00	
	Ponding	1.00	saturated zone	İ	
	Restricted	0.69	Flooding	1.00	
	permeability		Ponding	1.00	
			Too acid	0.07	
22A:					
Comstock	Very limited	į	  Very limited	i	
	Restricted	1.00	Depth to	1.00	
	permeability		saturated zone		
	Depth to	1.00	Too acid	0.31	
	saturated zone		Restricted	0.21	
			permeability		
24A:					
Poskin	Very limited	į	Very limited	į	
	Depth to	1.00	Filtering	1.00	
	saturated zone		capacity		
	Restricted	1.00	Depth to	1.00	
	permeability		saturated zone		
			Too acid	0.31	
27A:					
Scott Lake	Very limited	İ	  Very limited	İ	
	Depth to	1.00	Filtering	1.00	
	saturated zone		capacity		
	Restricted	1.00	Depth to	0.86	
	permeability		saturated zone		
			Too acid	0.31	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatment   of wastewater		
	Rating class and limiting features	Value	Rating class and limiting features	Value	
28B: Haugen, very stony	   Very limited   Restricted   permeability   Depth to   saturated zone	      1.00    0.99     	Very limited   Depth to   saturated zone   Too acid   Restricted   permeability   Too steep for   surface   application	    0.99    0.91  0.60    0.08	
Haugen	   Very limited   Restricted   permeability   Depth to   saturated zone	  1.00    0.99   	Very limited   Depth to   saturated zone   Too acid   Restricted   permeability   Too steep for surface   application	  0.99    0.91  0.60    0.08	
Rosholt, very stony	  Very limited   Restricted   permeability   	  1.00       	  Very limited   Filtering   capacity   Too acid   Too steep for   surface   application	  1.00    0.31  0.08	
Rosholt	  Very limited   Restricted   permeability   	  1.00       	  Very limited   Filtering   capacity   Too acid   Too steep for   surface   application	  1.00    0.31  0.08	
28C: Haugen, very stony	   Very limited   Restricted   permeability   Slope   Depth to   saturated zone	   1.00   1.00   1.00   0.99     	Very limited Too steep for surface application Depth to saturated zone Too acid Restricted permeability Too steep for sprinkler application	         1.00       0.99   0.60   0.50	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatment   of wastewater		
	Rating class and limiting features	Value	Rating class and limiting features	Value	
28C:	 		 		
Haugen	Very limited   Restricted   permeability		Very limited   Too steep for   surface	1.00	
	Slope   Depth to   saturated zone	1.00  0.99 	application Depth to saturated zone	0.99	
	 		Too acid Restricted permeability Too steep for	0.91  0.60    0.50	
	 		sprinkler application		
Rosholt, very stony	Very limited   Slope   Restricted	  1.00  1.00	Very limited   Filtering   capacity	1.00	
	permeability		Too steep for surface application	1.00	
			Too steep for sprinkler	0.50	
	   	   	application Too acid	0.31	
Rosholt	Very limited   Slope   Restricted	  1.00  1.00	Very limited   Filtering   capacity	1.00	
	permeability		Too steep for surface	1.00	
	   	   	application Too steep for sprinkler	  0.50 	
	 		application   Too acid 	  0.31 	
33B: Chetek	  Very limited   Restricted	    1.00	  Very limited   Filtering	    1.00	
	permeability   		capacity Too steep for surface	0.08	
	 	   	application Too acid	0.07	
33C: Chetek	  Very limited   Restricted	    1.00	  Very limited   Filtering	    1.00	
	permeability   Slope 	  1.00 	capacity Too steep for surface	  1.00 	
	 		application Too steep for sprinkler application	0.50	
	 		Too acid	0.07	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	   Rapid infiltrati   of wastewater 		Slow rate treatment of wastewater		
	Rating class and limiting features	Value	Rating class and   limiting features	Value	
38A: Rosholt	  Very limited   Restricted   permeability	    1.00 	  Very limited   Filtering   capacity   Too acid	  1.00    0.31	
38B: Rosholt	  Very limited   Restricted   permeability   	    1.00         	   Very limited   Filtering   capacity   Too acid   Too steep for   surface   application	  1.00    0.31  0.08	
38C: Rosholt	  Very limited   Slope   Restricted   permeability 	  1.00  1.00         	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	  1.00    1.00      0.50      0.31	
38D: Rosholt	  Very limited   Slope   Restricted   permeability   	  1.00  1.00         	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	  1.00    1.00      1.00        0.31	
42D: Amery	  Very limited   Slope   Restricted   permeability 	   1.00   1.00   1.00	Very limited Too steep for surface application Too steep for sprinkler application Too acid Restricted permeability	   1.00   1.00   1.00   1.00   0.77   0.21	
43B: Antigo	  Very limited   Restricted   permeability   	  1.00         	   Very limited   Filtering   capacity   Too acid   Too steep for   surface   application	  1.00    0.31  0.08	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatment   of wastewater		
	Rating class and limiting features	Value	Rating class and   limiting features	Value	
43C: Antigo	Very limited Restricted permeability Slope	    1.00    1.00   	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application	    1.00    1.00      0.94	
43D: Antigo	 	           1.00   1.00     	Too acid  Very limited  Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	0.31     1.00   1.00   1.00   1.00   1.00	
48A: Brill	  Very limited   Depth to   saturated zone   Restricted   permeability	  1.00    1.00	   Very limited   Filtering   capacity   Depth to   saturated zone   Too acid	  1.00    1.00    0.31	
63A: Crystal Lake	  Very limited   Restricted   permeability   Depth to   saturated zone	    1.00    1.00 	  Very limited   Depth to   saturated zone   Too acid   Restricted   permeability	  0.99    0.31  0.21	
63B: Crystal Lake	: -	  1.00    1.00       	saturated zone	  0.99    0.31  0.21    0.08	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatment   of wastewater		
	Rating class and	Value	Rating class and   limiting features	Value	
63C: Crystal Lake	    Very limited   Restricted   permeability   Depth to	    1.00    1.00	  Very limited   Too steep for   surface   application	    1.00	
	saturated zone   Slope 	  1.00     	Depth to   saturated zone   Too steep for   sprinkler   application	0.99	
63E:			Too acid Restricted permeability	0.31	
Crystal Lake	Slope   Restricted   permeability	  1.00  1.00	   Very limited   Too steep for   surface   application	1.00	
	Depth to   saturated zone       	1.00             	Too steep for sprinkler application Depth to saturated zone Too acid Restricted permeability	1.00      0.86    0.31  0.21	
64A: Totagatic	  Very limited   Flooding   Depth to   saturated zone   Ponding	    1.00  1.00    1.00	   Very limited   Filtering   capacity   Depth to   saturated zone   Flooding   Ponding   Too acid	    1.00    1.00  1.00  0.77	
Winterfield	   Very limited   Flooding   Depth to   saturated zone 	  1.00  1.00     	   Very limited   Filtering   capacity   Depth to   saturated zone   Flooding	  1.00    1.00    1.00	
69B: Keweenaw	   Somewhat limited   Restricted   permeability 	    0.61       	Somewhat limited Too acid Too steep for surface application Filtering capacity	  0.77  0.08      0.01	
Sayner	   Somewhat limited   Restricted   permeability   	  0.31       	Very limited	  1.00    0.77  0.08	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatment   of wastewater		
	Rating class and limiting features	Value	Rating class and   limiting features	Value	
69B: Vilas	  Not limited       		   Very limited   Filtering   capacity   Too acid   Too steep for   surface   application	    1.00    0.31  0.08	
69C: Keweenaw	Slope	1.00	  Very limited   Too steep for	      1.00	
	Restricted permeability	0.61           	surface application Too steep for sprinkler application Too acid Filtering capacity	  0.78      0.77  0.01	
Sayner	Very limited Slope Restricted permeability	  1.00  0.31 	   Very limited   Filtering   capacity   Too steep for   surface   application	  1.00    1.00	
	       		Too steep for sprinkler application Too acid	0.78        0.77	
Vilas	  Very limited   Slope   	1.00	Very limited   Filtering   capacity   Too steep for   surface	  1.00    1.00	
			application Too steep for sprinkler application Too acid	0.78	
69E: Keweenaw	  Very limited   Slope   Restricted   permeability	    1.00  0.61	  Very limited   Too steep for   surface   application	      1.00	
	Permeability		Too steep for   sprinkler   application   Too acid   Filtering   capacity	  1.00      0.77  0.01	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		   Slow rate treatm   of wastewater	
	Rating class and limiting features	Value	Rating class and   limiting features	Value
69E: Sayner	    Very limited	   	    Very limited	
	Slope   Restricted	1.00	Filtering   capacity	1.00
	permeability   	 	Too steep for surface application	1.00   
	 	   	Too steep for sprinkler application	1.00   
			Too acid	0.77
Vilas	Very limited   Slope 	1.00	Very limited   Filtering   capacity	1.00
	 		Too steep for surface application	1.00
	 	     	Too steep for sprinkler application	1.00
74B:	 		Too acid	0.31
Vilas	  Not limited 	 	  Very limited   Filtering	1.00
	 	   	capacity   Too acid 	0.31
74C: Vilas	  Very limited   Slope 	    1.00	  Very limited   Filtering   capacity	    1.00
	 	 	Too steep for surface application	1.00
	 	     	Too steep for sprinkler application	0.94
74D:		 	Too acid	0.31
Vilas	  Very limited   Slope	1.00	  Very limited   Filtering	1.00
	 	   	capacity Too steep for surface	1.00
	   	   	application Too steep for sprinkler	  1.00 
	 	   	application   Too acid 	  0.31 
100B: Menahga	  Not limited 	   	  Very limited   Filtering	  -  1.00
	 	   	capacity Too acid	0.99

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	   Rapid infiltrati   of wastewater 		   Slow rate treatm   of wastewater 	
	Rating class and limiting features	Value	Rating class and limiting features	Value
100C: Menahga	    Very limited   Slope	      1.00	    Very limited   Filtering	      1.00
	Slope   		capacity Too steep for surface	1.00
			application Too acid Too steep for sprinkler application	  0.99  0.50   
100D: Menahga	  Very limited   Slope 	    1.00	  Very limited   Filtering   capacity	    1.00
	 		Too steep for surface application Too steep for sprinkler	1.00      1.00
	   		application Too acid	    0.99 
127D: Amery	  Very limited   Slope   Restricted	  1.00  1.00	  Very limited   Too steep for   surface	    1.00 
	permeability     		application Too steep for sprinkler application Too acid	  1.00   
	 	     	Too acid   Restricted   permeability 	0.77  0.21 
Rosholt	Very limited   Slope   Restricted   permeability	  1.00  1.00	Very limited   Filtering   capacity   Too steep for	  1.00    1.00
		       	surface application Too steep for sprinkler application	    1.00 
127E:	 		Too acid	0.31
Amery	Slope   Restricted	  1.00  1.00	Very limited   Too steep for   surface	  1.00 
	permeability     		application Too steep for sprinkler application	1.00
	     		Too acid Restricted permeability	0.77  0.21 

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm   of wastewater	
	Rating class and limiting features	Value	Rating class and   limiting features	Value
127E: Rosholt	    Very limited	   	    Very limited	   
	Slope   Restricted	1.00	Filtering   capacity	1.00
	permeability   	   	Too steep for surface application	1.00   
	   	   	Too steep for sprinkler application	1.00   
			Too acid	0.31
156B: Magnor, very stony	  Very limited   Restricted	    1.00	  Very limited   Depth to	    1.00
	permeability Depth to	1.00	saturated zone Too acid	0.85
	saturated zone   Too acid	0.03	Restricted   permeability	0.43
Magnor	Restricted	1.00	  Very limited   Depth to	1.00
	permeability Depth to	1.00	saturated zone Too acid	0.85
	saturated zone Too acid	0.03	Restricted permeability	0.43
157B:		 		
Freeon, very stony	Very limited   Restricted   permeability   Depth to   saturated zone	  1.00    1.00         	Very limited Depth to saturated zone Too acid Restricted permeability Too steep for surface application	  1.00    0.77  0.43    0.08
Freeon	Very limited   Restricted	1.00	Very limited   Depth to	1.00
	permeability	1.00	saturated zone	
	Depth to   saturated zone   		Restricted permeability Too steep for surface application	0.85  0.43    0.08
157C:	 		 	!
Freeon, very stony	Very limited   Restricted   permeability   Depth to   saturated zone   Slope	  1.00    1.00    1.00	Very limited   Depth to   saturated zone   Too steep for   surface   application   Too acid   Too steep for   sprinkler   application	  1.00    1.00      0.77  0.50
	 	   	Restricted   permeability	0.43

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name		Rapid infiltration of wastewater		ent
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
157C:	į	į		į
Freeon	: -	1 00	Very limited	1 00
	Restricted permeability	1.00	Depth to saturated zone	1.00
	Depth to	1.00	Too steep for	1.00
	saturated zone	İ	surface	İ
	Slope	1.00	application	
	 		Too acid Too steep for	0.85
	 	1	sprinkler	0.50
			application	
	İ	į	Restricted	0.43
			permeability	
160A:	 	1	 	
Oesterle	  Very limited		  Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	Restricted	0.61	Depth to	1.00
	permeability	1	saturated zone Too acid	0.77
		İ		
182B:	!			
Padus	Very limited   Restricted	1.00	Very limited   Filtering	1.00
	permeability	1	capacity	1
			Too acid	0.31
182C: Padus	  Very limited	l I	  Very limited	
	Restricted	1.00	Filtering	1.00
	permeability	ĺ	capacity	İ
	Slope	1.00	Too steep for	1.00
	l I		surface application	
	 		Too steep for	0.94
		İ	sprinkler	
			application	
	 		Too acid	0.31
192A:	 		 	
Worcester	  Very limited	İ	  Very limited	İ
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	Restricted	1.00	Depth to saturated zone	1.00
	permeability	1	Too acid	0.31
		İ		
193A:				
Minocqua	-	1 00	Very limited	1 00
	Depth to saturated zone	1.00	Filtering   capacity	1.00
	Restricted	1.00	Depth to	1.00
	permeability	İ	saturated zone	i
	1 2			
	Ponding	1.00	Ponding Too acid	1.00

Table 22a.--Agricultural Waste Management--Continued

Map symbol   and soil name	Rapid infiltrati of wastewater		Slow rate treatment of wastewater	
	Rating class and	Value	Rating class and   limiting features	Value
		<u> </u>		1
215B: Pence	  Somewhat limited   Restricted   permeability	    0.61 	  Very limited   Filtering   capacity   Too acid	  1.00    0.31
0150	į	į		į
215C: Pence	  Very limited   Slope   Restricted	  1.00  0.61	  Very limited   Filtering   capacity	1.00
	permeability		Too steep for surface application	1.00
	 		Too steep for sprinkler application Too acid	0.94      0.31
			100 acid	
215D: Pence	  Very limited   Slope   Restricted	  1.00  0.61	  Very limited   Filtering   capacity	1.00
	permeability		Too steep for surface application	1.00
	 		Too steep for sprinkler application	1.00
			Too acid	0.31
315A: Rib	    -	į	   	į
KID	Very limited   Depth to   saturated zone	1.00	Very limited   Filtering   capacity	1.00
	Restricted   permeability   Ponding	1.00    1.00	Depth to   saturated zone   Ponding	1.00    1.00
			Too acid	0.31
337A:			 	
Plover	Very limited   Restricted   permeability	  1.00	Very limited   Depth to   saturated zone	1.00
	Depth to saturated zone	1.00	Restricted permeability	0.60
			Too acid 	0.31
368B: Mahtomedi	  Not limited		  Very limited   Filtering	    1.00
			capacity	į
	 		Too acid Too steep for surface	0.42
	 		application	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm   of wastewater	
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
368B:	 		 	
Cress	Very limited	į	Very limited	į
	Restricted	1.00	Filtering	1.00
	permeability		capacity	
			Too acid	0.31
	 		Too steep for surface	0.08
			application	
368C:	 			
Mahtomedi	Very limited	İ	Very limited	İ
	Slope	1.00	Filtering	1.00
			capacity	
	 		Too steep for surface	1.00
			application	
		İ	Too steep for	0.50
		İ	sprinkler	İ
			application	
	 		Too acid 	0.42
Cress	Very limited	İ	Very limited	İ
	Restricted	1.00	Filtering	1.00
	permeability		capacity	
	Slope	1.00	Too steep for surface	1.00
	 		application	
		i	Too steep for	0.50
	j	į	sprinkler	į
			application	
	 		Too acid	0.31
368D:	 	į	 	į
Mahtomedi	Very limited   Slope	1.00	Very limited   Filtering	1.00
			capacity	
		į	Too steep for	1.00
			surface	
			application	
			Too steep for	1.00
	 		sprinkler   application	
			Too acid	0.42
Cress	  Very limited		  Very limited	
	Slope	1.00	Filtering	1.00
	Restricted	1.00	capacity	į
	permeability	[	Too steep for	1.00
			surface	
			application	1 00
	 	I	Too steep for sprinkler	1.00
	! 		application	
		i	Too acid	0.31

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	   Rapid infiltrati   of wastewater 		   Slow rate treatm   of wastewater	
	Rating class and	Value	Rating class and   limiting features	Value
371A: Croswell	  Very limited   Depth to   saturated zone 	      1.00     	  Very limited   Filtering   capacity   Depth to   saturated zone   Too acid	    1.00    0.99    0.31
380B: Cress	   Very limited   Restricted   permeability 	    1.00       	Very limited Filtering capacity Too acid Too steep for surface application	    1.00    0.31  0.08
Rosholt	Very limited Restricted permeability	  1.00       	Very limited   Filtering   capacity   Too acid   Too steep for   surface   application	  1.00    0.31  0.08
380C: Cress	  Very limited   Restricted   permeability   Slope 	    1.00    1.00   	Very limited   Filtering   capacity   Too steep for   surface   application   Too steep for   sprinkler   application   Too acid	   1.00   1.00   0.50   0.31
Rosholt	   Very limited   Slope   Restricted   permeability 	  1.00  1.00         	Very limited    Filtering   capacity     Too steep for   surface   application     Too steep for   sprinkler   application     Too acid	  1.00    1.00      0.50      0.31
380D: Cress	  Very limited   Slope   Restricted   permeability 	    1.00  1.00       	Very limited   Filtering   capacity   Too steep for   surface   application   Too steep for   sprinkler   application   Too acid	   1.00   1.00   1.00   1.00   1.00

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm   of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
2000.				
380D: Rosholt	  Verv limited		  Very limited	
	Slope	1.00	Filtering	1.00
	Restricted	1.00	capacity	į
	permeability		Too steep for	1.00
			surface	
	 		application Too steep for	1.00
	 		sprinkler	
			application	i
	İ	j	Too acid	0.31
383B: Mahtomedi	  Not limited		  Very limited	
Mancomedi			Filtering	1.00
		İ	capacity	
	j	j	Too acid	0.42
	!			[
383C:	 			
Mahtomedi	Very limited   Slope	1.00	Very limited   Filtering	1.00
	Slope	1.00	capacity	1
			Too steep for	1.00
	j	j	surface	į
			application	
			Too steep for	0.50
			sprinkler application	
	 		Too acid	0.42
		j		i
383D:	!			
Mahtomedi	:		Very limited	
	Slope	1.00	Filtering   capacity	1.00
			Too steep for	1.00
	j	j	surface	į
	[		application	
			Too steep for	1.00
	 		sprinkler application	
	 		Too acid	0.42
		İ		i
396B:	[			[
Friendship			Very limited	
	Depth to saturated zone	1.00	Filtering   capacity	1.00
	Sacuraced Zone		Too acid	0.21
Wurtsmith	Very limited		Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone Too acid	0 03	capacity	1 00
	100 acid	0.03	Too acid Depth to	1.00
			saturated zone	
Grayling			Very limited	
	Too acid	0.21	Filtering	1.00
		1	capacity Too acid	1.00

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm	
	Rating class and limiting features	Value	Rating class and   limiting features	Value
397A: Perchlake	Very limited Depth to saturated zone	    1.00     	  Very limited   Filtering   capacity   Depth to   saturated zone   Too acid	    1.00    1.00    0.77
399B: Grayling	  Somewhat limited   Too acid	  0.21 	  Very limited   Filtering   capacity   Too acid	1.00
399C: Grayling	  Very limited   Slope   Too acid   	  1.00  0.21       	Very limited   Filtering   capacity   Too acid   Too steep for   surface   application   Too steep for   sprinkler   application	   1.00   1.00   1.00       0.50
399D: Grayling	  Very limited   Slope   Too acid   	  1.00  0.21     	Very limited   Filtering   capacity   Too steep for   surface   application   Too steep for   sprinkler   application   Too acid	   1.00   1.00   1.00   1.00   1.00
405A: Lupton	  Very limited   Depth to   saturated zone   Ponding   Restricted   permeability	    1.00    1.00  0.69	  Very limited   Depth to   saturated zone   Ponding	    1.00    1.00
Cathro	Very limited   Depth to   saturated zone   Restricted   permeability   Ponding	  1.00    1.00    1.00	   Very limited   Depth to   saturated zone   Ponding   Too acid	  1.00    1.00  0.07
Tawas		  1.00    1.00  0.69	Very limited   Filtering   capacity   Depth to   saturated zone   Ponding	  1.00    1.00    1.00

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatm	
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	1
406A:	İ		 	
Loxley	Very limited	į	  Very limited	İ
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	Ponding	1.00	Depth to	1.00
	Too acid	0.77	saturated zone	
	Restricted	0.69	Too acid Ponding	1.00
	permeability		Foliating	1
407A:				
Seelyeville	  Very limited	İ	  Very limited	İ
•	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	
	Ponding	1.00	Ponding	1.00
	Restricted	0.68	Too acid	0.31
	permeability			
Manlana	 			
Markey	Very limited   Depth to	1.00	Very limited   Filtering	1.00
	saturated zone	1	capacity	1
	Restricted	1.00	Depth to	1.00
	permeability	i	saturated zone	i
	Ponding	1.00	Ponding	1.00
410A:				
Seelyeville	: -		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone Ponding	1.00	saturated zone Ponding	1.00
	Restricted	0.68	Too acid	0.31
	permeability			
	į	į		j
Cathro	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Ponding Too acid	1.00
	permeability   Ponding	1.00	Too acid	0.07
412A:	İ	İ		İ
Rifle	Very limited	İ	Very limited	İ
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00
	Restricted	0.31	Filtering	0.01
	permeability		capacity	l
Tacoosh	  Very limited		  Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone	i	saturated zone	i
	Restricted	1.00	Ponding	1.00
	permeability			
	Ponding	1.00		
	ronaing		1	
4153			l 	1
415A:			Vorus limited	
415A: Greenwood	      Very limited	      1.00	    Very limited   Depth to	
	  -  Very limited   Depth to	      1.00	Depth to	    1.00
	      Very limited	      1.00    1.00	-	  1.00    1.00
	  Very limited   Depth to   saturated zone	į	Depth to saturated zone	į

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm   of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
439B: Graycalm	    Not limited   	       	    Very limited   Filtering   capacity   Too acid	    1.00    0.99
Menahga	  Not limited   	 	   Very limited   Filtering   capacity   Too acid	1.00
439C: Graycalm	  Very limited   Slope         	    1.00           	Very limited   Filtering   capacity   Too steep for   surface   application   Too acid   Too steep for   sprinkler   application	       1.00       1.00       0.99   0.50
Menahga	  Very limited   Slope         	  1.00             	Very limited   Filtering   capacity   Too steep for   surface   application   Too acid   Too steep for   sprinkler   application	  1.00    1.00      0.99  0.50
439D: Graycalm	  Very limited   Slope         	    1.00         	Very limited   Filtering   capacity   Too steep for   surface   application   Too steep for   sprinkler   application   Too acid	   1.00   1.00   1.00   1.00   0.99
Menahga	  Very limited   Slope           	  1.00             	Very limited   Filtering   capacity   Too steep for   surface   application   Too steep for   sprinkler   application   Too acid	  1.00    1.00      1.00      0.99

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatm	
	Rating class and limiting features	Value	Rating class and limiting features	Value
441C:	 		 	
Freeon	  Very limited	İ	  Very limited	İ
	Restricted	1.00	Depth to	1.00
	permeability		saturated zone	
	Depth to	1.00	Too steep for	1.00
	saturated zone	1.00	surface application	l
	blope		Too steep for	0.94
		İ	sprinkler	
		Ì	application	İ
			Too acid	0.85
	l I	 	Restricted permeability	0.43
			permeability	
Cathro	  Very limited	į	  Very limited	j
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted permeability	1.00	Ponding   Too acid	1.00
	Ponding	1.00		
				į
442C:	 		 	
Haugen	Very limited   Restricted	1.00	Very limited   Depth to	0.99
	permeability		saturated zone	
	Depth to	0.99	Too steep for	0.92
	saturated zone		surface	
	Slope	0.88	application	
	 		Too acid Restricted	0.91
	 	l I	permeability	
		İ	Too steep for	0.06
	İ	Ì	sprinkler	İ
			application	
Greenwood	  Verv limited		  Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	Ponding	1.00	Depth to	1.00
	Too acid	0.77	saturated zone Too acid	1.00
	permeability		Ponding	1.00
	į -	İ	ĺ	İ
443D:	 		 	
Amery	Very limited   Slope	1.00	Very limited   Too steep for	1.00
	Restricted	1.00	surface	
	permeability	į	application	İ
			Too steep for	1.00
			sprinkler	
	 		application Too acid	0 21
	 		Restricted	0.31
		İ	permeability	
	 		permeability	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
443D:			 	
Greenwood	  Very limited		  Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone	İ	capacity	
	Ponding	1.00	Depth to	1.00
	Too acid	0.77	saturated zone	
	Restricted   permeability	0.61	Too acid Ponding	1.00
461A:				
Bowstring	Very limited		Very limited	
	Flooding	1.00	Filtering	1.00
	Depth to	1.00	capacity	1 00
	saturated zone Ponding	1.00	Depth to saturated zone	1.00
	Restricted	0.69	Low adsorption	1.00
	permeability		Flooding	1.00
	į -	į	Ponding	1.00
484A:				
Greenwood	Very limited   Depth to	1.00	Very limited   Filtering	1 00
	saturated zone	1	capacity	1.00
	Ponding	1.00	Depth to	1.00
	Too acid	0.77	saturated zone	
	Restricted	0.61	Too acid	1.00
	permeability		Ponding	1.00
Beseman	Very limited	i	  Very limited	i
	Restricted	1.00	Depth to	1.00
	permeability		saturated zone	
	Depth to	1.00	Too acid	1.00
	saturated zone	11 00	Ponding	1.00
	Ponding	1.00	Restricted permeability	0.21
495B:			 	
Karlsborg	Very limited		Very limited	
	Restricted	1.00	Filtering	1.00
	permeability Depth to	1.00	capacity Depth to	1.00
	saturated zone	1	saturated zone	1
		i	Restricted	0.98
	İ	į	permeability	İ
			Too acid	0.77
		1	Too steep for	0.08
			surface application	
Grettum	  Very limited		  Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	[	1	Too acid	0.85
			Too steep for	0.08
		1	surface	
	1	1	application	1

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatmen	
	Rating class and limiting features	Value	Rating class and   limiting features	Value
495B:	 			
Perida	Very limited	i	  Very limited	i
	Restricted	1.00	Filtering	1.00
	permeability	İ	capacity	İ
	Depth to	0.09	Restricted	1.00
	saturated zone		permeability	
			Too acid	0.85
			Depth to	0.09
			saturated zone	
			Too steep for	0.08
			surface	
			application	!
495C:	 		  -	
Karlsborg	  Verv limited		  Very limited	
	Restricted	1.00	Filtering	1.00
	permeability		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	i	saturated zone	İ
	Slope	1.00	Too steep for	1.00
		İ	surface	İ
			application	
			Restricted	0.98
			permeability	
			Too acid	0.77
Grettum	  Very limited		  Very limited	
GIeccum	Depth to	1.00	Filtering	1.00
	saturated zone	1	capacity	1
	Slope	1.00	Too steep for	1.00
			surface	
		i	application	i
		i	Too acid	0.85
	İ	i	Too steep for	0.50
	j	İ	sprinkler	İ
	İ		application	İ
Perida	Very limited		Very limited	
	Restricted	1.00	Filtering	1.00
	permeability	1 00	capacity	
	Slope	1.00	Restricted	1.00
	Depth to saturated zone	0.09	permeability Too steep for	1.00
	Saturated Zone	I	surface	1
	 		application	
	! 		Too acid	0.85
	! 		Too steep for	0.50
			sprinkler	
		İ		i
	 	   	sprinkler   application 	   

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm   of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
495D:	 			
Karlsborg	Very limited   Slope   Restricted	  1.00  1.00	Very limited   Filtering   capacity	1.00
	permeability Depth to	1.00	Depth to saturated zone	1.00
	saturated zone	   	Too steep for surface application	1.00   
	 	     	Too steep for sprinkler application	1.00
	 	   	Restricted permeability	0.98
Grettum	Very limited   Slope   Depth to	  1.00  1.00	  Very limited   Filtering   capacity	1.00
	saturated zone		Too steep for surface	1.00
	 	   	application Too steep for sprinkler application	1.00
	 	   	Too acid	0.85
Perida	Very limited   Slope   Restricted	  1.00  1.00	Very limited   Filtering   capacity	  1.00
	permeability Depth to saturated zone	0.09	Too steep for surface application	1.00
		     	Too steep for sprinkler application	1.00
	   		Restricted permeability Too acid	1.00
497A:	 	   	100 acid   	
Meenon	  Very limited   Restricted   permeability	  1.00	  Very limited   Filtering   capacity	1.00
	Depth to saturated zone	1.00		1.00
	   	     	permeability   Too acid	0.31
515A: Manitowish	    Very limited   Depth to	      1.00	    Very limited   Filtering	1.00
	saturated zone Restricted	0.61	capacity Depth to	0.86
	permeability   	   	saturated zone   Too acid 	0.31

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm   of wastewater	
	Rating class and	Value	Rating class and limiting features	Value
	   Very limited   Restricted   permeability   Depth to   saturated zone   Ponding	    1.00    1.00    1.00	Very limited   Filtering   capacity   Depth to   saturated zone   Ponding   Restricted   permeability   Too acid	   1.00   1.00   1.00   0.98   0.31
524E: Rock outcrop	  Not rated		  Not rated	
Frogcreek	  Very limited   Restricted   permeability   Depth to   saturated zone	    1.00    1.00	Very limited Depth to saturated zone Too steep for surface	  1.00    1.00
	Slope	1.00	application Too acid Too steep for sprinkler application Restricted permeability	  0.31  0.22      0.21
Metonga	   Very limited   Slope   Depth to bedrock   Restricted   permeability   Too acid	  1.00  1.00  1.00    0.03	Very limited Depth to bedrock Too steep for surface application Too steep for sprinkler application Too acid	  1.00  1.00      1.00      0.31
542B: Haugen, very stony	    Very limited	   	    Very limited	   
	Restricted permeability Depth to saturated zone	1.00	Depth to saturated zone Too acid Restricted permeability Too steep for surface application	0.99     0.91   0.60     0.08
Haugen	   Very limited   Restricted   permeability   Depth to   saturated zone	  1.00    0.99     	Very limited   Depth to   saturated zone   Too acid   Restricted   permeability   Too steep for surface   application	  0.99    0.91  0.60    0.08

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm	
	Rating class and limiting features	Value	Rating class and limiting features	Value
542C: Haugen, very stony	Very limited Restricted permeability Slope Depth to saturated zone	    1.00    1.00  0.99	   Very limited   Too steep for   surface   application   Depth to   saturated zone   Too acid	    1.00      0.99    0.91
			Restricted permeability Too steep for sprinkler application	0.51
Haugen	Very limited Restricted permeability Slope Depth to saturated zone	  1.00    1.00  0.99     	Very limited Too steep for surface application Depth to saturated zone Too acid Restricted permeability Too steep for sprinkler application	  1.00      0.99    0.91  0.60    0.50
543B: Anigon	   Restricted   permeability 	  1.00         	Very limited	  1.00    0.31  0.08
543C2: Anigon	  Very limited   Restricted   permeability   Slope 	    1.00  1.00     	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	  1.00    1.00      0.50      0.31
544F: Menahga	  Very limited   Slope       	    1.00           	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	  1.00  1.00    1.00    1.00 

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatm   of wastewater	
	Rating class and	Value	Rating class and limiting features	Value
544F: Mahtomedi	    Verv limited	   	    Very limited	   
	Slope	1.00	Filtering   capacity	1.00
	 		Too steep for surface application	1.00
	   		Too steep for sprinkler application	1.00
	   	   	Too acid	0.42
555A: Fordum	  Very limited		  Very limited	
FOI dum	Flooding Depth to	1.00	Filtering   capacity	1.00
	saturated zone   Restricted   permeability	1.00	Depth to saturated zone Flooding	1.00    1.00
	Ponding	1.00	Ponding   Ponding	1.00
574B: Sayner	  Somewhat limited		  Very limited	
	Restricted permeability	0.31	Filtering   capacity   Too acid	1.00    0.77
		į		
574C: Sayner	  Very limited   Slope	    1.00	  Very limited   Filtering	    1.00
	Restricted permeability	0.31	capacity Too steep for	1.00
	   	   	surface application Too steep for	    0.94
	   	   	sprinkler   application   Too acid	    0.77
574E:	 		 	
Sayner	Very limited   Slope   Restricted	  1.00  0.31	Very limited   Filtering   capacity	1.00
	permeability		Too steep for surface application	1.00
			Too steep for sprinkler	1.00
	   	   	application Too acid	0.77
579B: Parkfalls		<u> </u> 	  Very limited	İ İ
	Restricted permeability Depth to	1.00    1.00	Depth to   saturated zone   Too acid	1.00    0.77
	saturated zone   		Restricted   permeability	0.21

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm   of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
600A: Haplosaprists	  Not rated		  Not rated	
Psammaquents	  Not rated		  Not rated	
615B:	 		 	
Cress	  Very limited	i	  Very limited	i
	Restricted	1.00	Filtering	1.00
	permeability		capacity	
			Too acid	0.31
615C:	 		 	l
Cress	  Very limited	i	  Very limited	
	Restricted	1.00	Filtering	1.00
	permeability		capacity	
	Slope	1.00	Too steep for	1.00
			surface	
	l I		application Too steep for	0.50
	 	i	sprinkler	0.50
		i	application	i
	İ	į	Too acid	0.31
615D:	  Town limited		  Very limited	
Cress	Very limited   Slope	1.00	Filtering	1.00
	Restricted	1.00	capacity	
	permeability	j	Too steep for	1.00
			surface	
			application	
	 		Too steep for sprinkler	1.00
	 		application	
		i	Too acid	0.31
		İ		
623A:				
Capitola	Very limited	1 00	Very limited	1 00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted	1.00	Ponding	1.00
	permeability	į	Too acid	0.31
	Ponding	1.00	Filtering	0.01
			capacity	
624A:	 		 	l
Ossmer	  Very limited	i	  Very limited	i
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	Restricted	1.00	Depth to	1.00
	permeability		saturated zone Too acid	0.31
			100 acid	
632A:	į	i		i
Aftad	Very limited		Very limited	
	Restricted	1.00	Depth to	0.99
	permeability		saturated zone	
	Depth to saturated zone	1.00	Too acid	0.31
		1	Vestiinied	0.41
		İ	permeability	ĺ

Table 22a.--Agricultural Waste Management--Continued

Map symbol   and soil name	   Rapid infiltrati   of wastewater 		   Slow rate treatm   of wastewater 	
	Rating class and limiting features	Value	Rating class and limiting features	Value
632B: Aftad	  Very limited   Restricted   permeability   Depth to   saturated zone	    1.00    1.00     		    0.99    0.31  0.21    0.08
632C: Aftad	    Very limited   Restricted	      1.00	    Very limited   Too steep for	      1.00
	permeability Depth to saturated zone Slope	  1.00    1.00   	surface application Depth to saturated zone Too steep for sprinkler application Too acid	  0.99    0.50      0.31
633F: Pence	  -   Very limited   Slope   Restricted   permeability	        1.00  0.61 	Restricted permeability  Very limited Filtering capacity Too steep for surface application	0.21        1.00    1.00
		     	Too steep for sprinkler application	1.00
Padus	Very limited   Slope   Restricted   permeability	  1.00  1.00 	Very limited   Filtering   capacity   Too steep for   surface   application	  1.00    1.00 
648B:		       	Too steep for sprinkler application Too acid	1.00        0.31 
	   Very limited   Depth to   saturated zone   Restricted   permeability	  1.00    1.00   	Very limited    Depth to   saturated zone   Too acid   Too steep for   surface   application	  1.00    0.31  0.08

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm   of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
670C:			 	
Keweenaw	  Very limited   Slope   Restricted	  1.00  0.61	  Very limited   Too steep for   surface	1.00
	permeability     	     	application   Too steep for   sprinkler   application	  0.94   
	 	     	Too acid Filtering capacity	0.77  0.01 
Pence	Very limited   Slope   Restricted	1.00	Very limited Filtering capacity	1.00
	permeability     	     	Too steep for surface application Too steep for	1.00        0.94
			sprinkler application Too acid	0.31
670E:				
Keweenaw	   Very limited   Slope   Restricted   permeability	  1.00  0.61	Very limited Too steep for surface application	1.00
	permeability   		Too steep for sprinkler application	1.00
	 		Too acid Filtering capacity	0.77  0.01 
Pence	  Very limited   Slope   Restricted	  1.00  0.61	  Very limited   Filtering   capacity	1.00
	permeability   		Too steep for surface application	1.00
	 	     	Too steep for sprinkler application Too acid	1.00        0.31
4745	į	į		į
671B: Spoonerhill, stony	  Very limited   Restricted   permeability	1.00	  Very limited   Depth to   saturated zone	    0.99
	Depth to   saturated zone	0.99	Too acid Restricted permeability	0.31
	 		Too steep for surface application	0.08
	 	   	Filtering   capacity 	0.01

Table 22a.--Agricultural Waste Management--Continued

Map symbol   and soil name	Rapid infiltrati		Slow rate treatm   of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
671B: Spoonerhill	   Very limited   Restricted   permeability   Depth to   saturated zone	    1.00    0.99   	Very limited   Depth to   saturated zone   Too acid   Restricted   permeability   Too steep for surface	    0.99    0.31  0.21    0.08
680B:	 	       	application   Filtering   capacity 	0.01
Stanberry, stony	Very limited   Restricted   permeability   Depth to   saturated zone	  1.00    0.99   	Very limited   Filtering   capacity   Depth to   saturated zone   Restricted   permeability   Too steep for	  1.00    0.99    0.21    0.08
Pence, stony	  -  Somewhat limited   Restricted   permeability   	          0.61     	surface application Too acid Very limited Filtering capacity Too acid Too steep for surface	  0.03    1.00    0.31  0.08
683A: Tipler	  Very limited   Depth to   saturated zone   Restricted   permeability	        1.00    1.00	application  Very limited  Filtering  capacity  Depth to  saturated zone  Too acid	      1.00    0.86    0.31
706A: Winterfield	  Very limited   Flooding   Depth to   saturated zone	  1.00  1.00   	   Very limited   Filtering   capacity   Depth to   saturated zone   Flooding	  1.00    1.00    1.00
Totagatic	   Very limited   Flooding   Depth to   saturated zone   Ponding 	  1.00  1.00    1.00   	Very limited   Filtering   capacity   Depth to   saturated zone   Flooding   Ponding   Too acid	  1.00    1.00    1.00  1.00  0.42

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm   of wastewater	
	Rating class and limiting features	Value	Rating class and   limiting features	Value
724A: Rib	  Very limited   Depth to   saturated zone   Restricted   permeability   Ponding	    1.00    1.00 	Very limited Filtering capacity Depth to saturated zone Ponding Too acid	    1.00    1.00    1.00  0.31
Rock outcrop	  Not rated		  Not rated	
726B: Sissabagama	  Very limited   Restricted   permeability   Depth to   saturated zone	  1.00    1.00     	Very limited   Filtering   capacity   Depth to   saturated zone   Restricted   permeability   Too acid	  1.00    0.86    0.60    0.31
733A: Wozny	  Very limited   Depth to   saturated zone   Restricted   permeability   Ponding	  1.00    1.00    1.00	   Very limited   Depth to   saturated zone   Ponding   Too acid   Filtering   capacity	  1.00    1.00  0.31  0.01
771A: Lenroot	  Very limited   Depth to   saturated zone 	      1.00     	  Very limited   Filtering   capacity   Depth to   saturated zone   Too acid	    1.00    0.99    0.42
827A: Scoba	  Very limited   Depth to   saturated zone   Restricted   permeability	    1.00    1.00	Very limited Filtering capacity Depth to saturated zone Too acid	 
853C: Frogcreek	  Very limited   Restricted   permeability   Depth to   saturated zone   Slope 	    1.00    1.00    1.00   	Very limited   Depth to   saturated zone   Too steep for   surface   application   Too acid   Too steep for   sprinkler   application   Restricted   permeability	   1.00   1.00   1.00   0.31   0.22   1 0.21

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatm	
	Rating class and limiting features	Value	   Rating class and   limiting features	Value
853C: Stinnett	Restricted permeability Depth to saturated zone	    1.00    1.00 	   Very limited   Depth to   saturated zone   Too acid   Restricted   permeability	    1.00    0.31  0.21
Wozny	Very limited   Depth to   saturated zone   Restricted   permeability   Ponding	  1.00    1.00    1.00	Very limited   Depth to   saturated zone   Ponding   Too acid   Filtering   capacity	  1.00    1.00  0.31  0.01 
856B: Stinnett	  Very limited   Restricted   permeability   Depth to   saturated zone	  1.00    1.00 	Very limited   Depth to   saturated zone   Too acid   Restricted   permeability	  1.00    0.31  0.21
857B: Frogcreek		  1.00    1.00         	Very limited   Depth to   saturated zone   Too acid   Restricted   permeability   Too steep for   surface   application	  1.00    0.31  0.21    0.08
857C: Frogcreek		   1.00   1.00   1.00   1.00   1	Very limited   Depth to   saturated zone   Too steep for   surface   application   Too steep for   sprinkler   application   Too acid   Restricted   permeability	   1.00   1.00   0.78   0.31   0.21
873B: Stanberry	  Very limited   Restricted   permeability   Depth to   saturated zone	   1.00   0.99 	Very limited   Filtering   capacity     Depth to   saturated zone     Restricted   permeability     Too steep for   surface   application     Too acid	   1.00   0.99   0.21   0.08   0.08

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm   of wastewater	
	Rating class and limiting features	Value	Rating class and   limiting features	Value
873C: Stanberry	Very limited Restricted permeability Slope Depth to saturated zone	    1.00    1.00  0.99 	Very limited Filtering capacity Too steep for surface application Depth to saturated zone Too steep for sprinkler	    1.00    1.00      0.99
	 		application Restricted permeability	0.21
873D: Stanberry	Very limited   Slope   Restricted   permeability   Depth to   saturated zone	  1.00  1.00    0.99     	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to saturated zone Restricted permeability	   1.00   1.00   1.00   1.00   1.00   0.99   0.21
905A: Cublake	  Very limited   Depth to   saturated zone   Restricted   permeability   Too acid	  1.00    1.00    0.03	  Very limited   Filtering   capacity   Depth to   saturated zone   Too acid	  1.00    0.86    0.77
926A: Flink	  Very limited   Depth to   saturated zone   Restricted   permeability   Too acid	  1.00    1.00    0.03	  Very limited   Filtering   capacity   Depth to   saturated zone   Too acid	  1.00    1.00    0.77
943D: Stanberry	   Very limited   Restricted   permeability   Slope   Depth to   saturated zone	   1.00   1.00   0.99     	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to saturated zone Restricted permeability	         1.00     1.00         1.00         0.99 

Table 22a.--Agricultural Waste Management--Continued

	.00 .00 .00
943D:  Greenwood	.00
Greenwood	.00
Depth to   1.00   Depth to   1.00   saturated zone   saturated zone   saturated zone   saturated zone   Restricted   1.00   Too acid   1.00   permeability   Ponding   1.00   Filtering   1.00   Filtering   1.00   Too acid   1.0	.00
Saturated zone   Saturated zone   Restricted   1.00   Too acid   1.   permeability   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   1.   Ponding   Pond	.00
Restricted	.00
permeability	.00
Ponding	.01
948A:  Billyboy	
Billyboy	
Billyboy	
Depth to   1.00   Filtering   1.00   Saturated zone   capacity   Restricted   1.00   Depth to   1.00	
Saturated zone   Capacity   Restricted   1.00   Depth to      Depth to	.00
Restricted	
970C:	.00
970C:	
Neweenaw	.31
Neweenaw	
Slope	
permeability   application   Too steep for   0.	.00
Too steep for   0.	
sprinkler   application   Too acid   0.   Filtering   0.	
application	.94
Too acid   0.	
Filtering   0   capacity	.77
	.01
Slope	
Slope	
Restricted   0.61   capacity   permeability   Too steep for   1.   surface   application   Too steep for   0.	٥٥
permeability   Too steep for   1.       surface       application     Too steep for   0.	.00
application Too steep for 0.	.00
Too steep for 0	
sprinkler	.94
application	
	.31
Greenwood   Very limited   Very limited	
	.00
saturated zone   capacity	.00
Ponding   1.00   Depth to   1.00   Too acid   0.77   saturated zone	.00
	.00
permeability Ponding 1.	.00
970E:	
Keweenaw   Very limited   Very limited     Slope   1.00   Too steep for   1.	.00
Restricted   0.61   surface	
permeability application	
· · · · · · · · · · · · · · · · · · ·	.00
sprinkler	
application	77
	.77 .01
capacity	
i i i i i i i	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatment   of wastewater	
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	1
970E:	İ	į		İ
Pence	Very limited		Very limited	
	Slope Restricted	1.00	Filtering   capacity	1.00
	permeability	0.01	Too steep for	1.00
		i	surface	
	İ	į	application	j
			Too steep for	1.00
		!	sprinkler	
			application	
	 	1	Too acid	0.31
Greenwood	  Very limited		  Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	Ponding	1.00	Depth to	1.00
	Too acid	0.77	saturated zone	
	Restricted permeability	0.61	Too acid Ponding	1.00
	permeabrincy		ronarng	
1070C:	İ	į		j
Fremstadt	Very limited		Very limited	
	Slope	1.00	Too steep for	1.00
	Restricted permeability	0.31	surface	
	permeability	I	application Too steep for	0.78
	! 		sprinkler	
		i	application	i
	İ	Ì	Too acid	0.31
		!	Filtering	0.01
			capacity	
Cress	  Very limited		  Very limited	
	Restricted	1.00	Filtering	1.00
	permeability	İ	capacity	į
	Slope	1.00	Too steep for	1.00
			surface	
	 		application Too steep for	0.50
	 		sprinkler	0.30
		İ	application	i
	İ	Ì	Too acid	0.31
		!		
1070D: Fremstadt	 		  Very limited	
Fremstadt	Slope	1.00	Too steep for	1.00
	Restricted	0.31	surface	
	permeability	İ	application	į
	[	1	Too steep for	1.00
		1	sprinkler	
	 	1	application	0 21
	 	1	Too acid	0.31
		i	capacity	
	İ	İ	- ·	į

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltration of wastewater		Slow rate treatment   of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
1070D: Cress	    Very limited		    Very limited	
	Slope   Restricted   permeability 	1.00  1.00 	Filtering   capacity   Too steep for   surface	1.00    1.00
	 	     	application Too steep for sprinkler application	1.00
			Too acid	0.31
1080B: Spoonerhill	  Very limited   Restricted	    1.00	  Very limited   Depth to	    0.99
	permeability Depth to saturated zone	0.99	saturated zone   Too acid   Restricted	  0.31  0.21
		     	permeability   Too steep for   surface	0.08
	 	     	application Filtering capacity	0.01
Spoonerhill, stony	  Very limited   Restricted   permeability	  1.00 	  Very limited   Depth to   saturated zone	0.99
	Depth to saturated zone	0.99   	Too acid Restricted permeability	0.31  0.21 
	 	   	Too steep for surface application	0.08
	 	   	Filtering   capacity 	0.01   
Cress	  Very limited   Restricted   permeability	1.00	  Very limited   Filtering   capacity	1.00
1653C:	 		Too acid	0.31
Stanberry	  Very limited   Restricted   permeability	1.00	  Very limited   Filtering   capacity	1.00
	Slope   Depth to   saturated zone	1.00	Too steep for surface application	1.00
	saturated zone		Depth to saturated zone	0.99
	   	   	Too steep for sprinkler application	0.50   
	 	   	Restricted   permeability 	0.21

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatment   of wastewater	
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
1653C:		!		!
Parkfalls	-	1	Very limited	
	Restricted	1.00		1.00
	permeability	1 00	saturated zone Too acid	0.77
	Depth to saturated zone	1.00	Restricted	0.77
	saturated zone		permeability	10.21
	] 		permeability	i
Wozny	  Very limited	i	  Very limited	i
•	Depth to	1.00	: -	1.00
	saturated zone	i	saturated zone	i
	Restricted	1.00	Ponding	1.00
	permeability		Too acid	0.31
	Ponding	1.00	Filtering	0.01
			capacity	
	!			
2015:	 		 	!
Pits	Not rated		Not rated	-
2050:	l I		  -	1
Landfill	  Not rated	1	  Not rated	1
nandilii	NOC Taced		NOC Taced	1
3011A:		i	 	i
Barronett	Very limited	i	  Very limited	i
	Restricted	1.00		1.00
	permeability	İ	saturated zone	İ
	Depth to	1.00	Ponding	1.00
	saturated zone		Too acid	0.31
	Ponding	1.00	Restricted	0.21
	!		permeability	
				!
3125A:				
Meehan	Depth to	1.00	Very limited   Filtering	1.00
	saturated zone	1	capacity	1
	sacuraced zone		Depth to	1.00
		i	saturated zone	
		i	Too acid	0.85
	İ	į	İ	į
3126A:				
Wurtsmith	Very limited		Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	Too acid	0.03	•	1.00
			Depth to	0.99
	 		saturated zone	
3276A:	 	1	! 	
Au Gres	  Verv limited	i	  Very limited	
	Depth to	1.00	: -	1.00
	saturated zone	i	capacity	i
	Restricted	1.00		1.00
	Restricted	1	Depen co	1
	permeability		saturated zone	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltration of wastewater		Slow rate treatment   of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
3312B:			 	
Glendenning, very		i		i
stony	Very limited	i	Very limited	i
_	Restricted	1.00	Depth to	1.00
	permeability	į	saturated zone	İ
	Depth to	1.00	Too acid	0.31
	saturated zone		Restricted	0.21
			permeability	
Glendenning	  Very limited		  Very limited	
	Restricted	1.00	Depth to	1.00
	permeability		saturated zone	
	Depth to	1.00	Too acid	0.31
	saturated zone		Restricted	0.21
	 		permeability	
3336A:		į		į
Fenander	Very limited		Very limited	
	Restricted	1.00	Depth to	1.00
	permeability	1 00	saturated zone	1 00
	Depth to saturated zone	1.00	Ponding   Restricted	1.00
	Ponding	1.00	permeability	
3403A:			[ [	
Loxley	  Very limited	i	  Very limited	
-	Depth to	1.00	Filtering	1.00
	saturated zone	i	capacity	İ
	Ponding	1.00	Depth to	1.00
	Too acid	0.77	saturated zone	İ
	Restricted	0.69	Too acid	1.00
	permeability		Ponding	1.00
Beseman	  Very limited		  Very limited	
	Restricted	1.00	Depth to	1.00
	permeability		saturated zone	
	Depth to	1.00	Too acid	1.00
	saturated zone		Ponding	1.00
	Ponding 	1.00	Restricted permeability	0.21
P		į		
Dawson	Very limited		Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone Restricted	1.00	capacity Depth to	1.00
	!	11.00	saturated zone	11.00
	permeability   Ponding	1.00	saturated zone   Too acid	1.00
	Too acid	0.77	Ponding	1.00
	100 acid		Low adsorption	0.01
	I .	1		10101

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatment   of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
3424C: Frogcreek	   Very limited   Restricted   permeability   Depth to   saturated zone   Slope	         1.00     1.00     1.00 	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application Restricted permeability	   1.00   1.00   1.00   0.31   0.22   1 0.21
Magroc	   Very limited   Depth to   saturated zone   Depth to bedrock   Restricted   permeability	1.00	  Very limited   Depth to   saturated zone   Depth to bedrock   Too acid	  1.00    0.42  0.31
Stinnett	Very limited   Restricted   permeability   Depth to   saturated zone	  1.00    1.00 	Very limited Depth to saturated zone Too acid Restricted permeability	  1.00    0.31  0.21
Rock outcrop	  Not rated		  Not rated	
3446A: Newson	  Very limited   Depth to   saturated zone   Ponding   Too acid	    1.00    1.00  0.07	Very limited   Filtering   capacity   Depth to   saturated zone   Too acid   Ponding	    1.00    1.00    1.00
3448B: Grettum	  Very limited   Depth to   saturated zone	    1.00 	  Very limited   Filtering   capacity   Too acid	  1.00    0.85
3448C: Grettum	  Very limited   Depth to   saturated zone   Slope 	    1.00    1.00       	Very limited   Filtering   capacity   Too steep for   surface   application   Too acid   Too steep for   sprinkler   application	   1.00   1.00   1.00   0.85   0.50

Table 22a.--Agricultural Waste Management--Continued

Map symbol	Rapid infiltration		Slow rate treatment	
and soil name	of wastewater		of wastewater	
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	<u> </u>
3516A:				
Slimlake	Very limited	į į	Very limited	i
	Depth to	1.00	Filtering	1.00
	saturated zone	İ	capacity	İ
	Restricted	0.31	Depth to	0.86
	permeability		saturated zone	
			Too acid	0.42
3629B:				
Perida	Very limited	İ	Very limited	İ
	Restricted	1.00	Filtering	1.00
	permeability		capacity	
	Depth to	0.09	Restricted	1.00
	saturated zone		permeability	
			Too acid	0.85
			Depth to	0.09
			saturated zone	
M-W:				
Miscellaneous water	Not rated	į	Not rated	į
Ñ:	 	 	 	
Water	Not rated	İ	Not rated	į

Table 22b.--Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol	Application of		Application	
and soil name	manure and food		of sewage sludge	
	processing wast			
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
	1	i i		i
3A:		i		i
Totagatic	Very limited	i	  Very limited	i
5	Filtering	1.00	Filtering	1.00
	capacity	İ	capacity	İ
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Flooding	1.00	Flooding	1.00
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
Bowstring	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Flooding	1.00	Flooding	1.00
	Low adsorption	1.00	Low adsorption	1.00
	Ponding	1.00	Ponding	1.00
Ausable	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	1 00	capacity	1 00
	Depth to	1.00	Depth to	1.00
	saturated zone	1 00	saturated zone	1.00
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
	leaching	0.50	ronaing	1
22A:	 	i		i
Comstock	  Very limited	i	  Very limited	i
	Depth to	1.00	Depth to	1.00
	saturated zone	i	saturated zone	i
	Restricted	0.41	Too acid	0.31
	permeability	i	Restricted	0.31
	Too acid	0.08	permeability	i
	İ	į		İ
24A:				
Poskin	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Too acid	0.08	Too acid	0.31
27A:		ļ		
Scott Lake			Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	0.86	Depth to	0.86
	saturated zone		saturated zone	
			100 2010	
	Too acid Droughty	0.08	Droughty	0.31

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast		Application of sewage sludg	e
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
28B:				
Haugen, very stony		:	Very limited	
	Depth to saturated zone	0.99	Depth to saturated zone	0.99
	Restricted	0.89	Too acid	0.91
	permeability		Restricted	0.78
	Too stony	0.50	permeability	
	Too acid	0.32		į
Haugen	  Very limited		  Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.89	Too acid	0.91
	permeability Too acid	0.32	Restricted permeability	0.78
	100 acid		permeability	
Rosholt, very stony	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer Too stony	1.00	Droughty Too acid	0.40
	Droughty	0.50	100 acid	0.31
	Too acid	0.08		
Rosholt	  Very limited		  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	İ	capacity	j
	Dense layer	1.00	Droughty	0.33
	Droughty	0.33	Too acid	0.31
	Too acid	0.08	 	
28C:				İ
Haugen, very stony			Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone Restricted		saturated zone Too acid	
	permeability	0.89	Restricted	0.91
	Too stony	0.50	permeability	0.70
	Too acid	0.32	Slope	0.04
	Slope	0.04	-	į
Haugen	  Very limited		  Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.89	Too acid	0.91
	permeability		Restricted	0.78
	Too acid	0.32	permeability Slope	0.04
Dogholt	 		 	
Rosholt, very stony	Very limited   Filtering	1.00	Very limited   Filtering	1.00
	capacity	1.00	capacity	1.00
	Dense layer	1.00	Droughty	0.40
			1	1
	Too stony	0.50	Too acid	0.31
		0.50	Too acid   Slope	0.31

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast	-	Application of sewage sludge	
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
200				
28C: Rosholt	  Very limited		  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	į	capacity	İ
	Dense layer	1.00	Droughty	0.33
	Droughty	0.33	Too acid	0.31
	Too acid	0.08	Slope	0.04
	Slope	0.04	 	
33B:	 		 	
Chetek	  Very limited	i	  Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity	į	capacity	İ
	Droughty	0.94	Droughty	0.94
	Too acid	0.02	Too acid	0.07
		ļ		
33C:			  Very limited	
Chetek	Very limited   Filtering	1.00	Very limited   Filtering	1.00
	capacity	1	capacity	1
	Droughty	0.94	Droughty	0.94
	Slope	0.04	Too acid	0.07
	Too acid	0.02	Slope	0.04
	İ	Ì		İ
38A:				1
Rosholt	Very limited	1	Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer Droughty	1.00  0.33	Droughty Too acid	0.33
	Too acid	0.08	100 acid	0.31
				i
38B:	İ	į		į
Rosholt	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty Too acid	0.33
	Droughty Too acid	0.33	100 acid	0.31
	100 actu	1	 	1
38C:		i		i
Rosholt		ĺ	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.33
	Droughty	0.33	Too acid	0.31
	Too acid	0.08	Slope	0.04
	biope			1
38D:	İ	i		İ
Rosholt	  Very limited		  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	1
	Dense layer	1.00	Slope	1.00
	Slope	1.00	Droughty	0.33
	Droughty	0.33	Too acid	0.31
	Too acid	0.08	i I	i

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast		Application of sewage sludg	re
	:		Dating along and	1701
	Rating class and   limiting features	Value	Rating class and limiting features	Value
42D: Amery	  Very limited		  Very limited	
	Slope	1.00	Slope	1.00
	Too stony	0.50	Too acid	0.77
	Restricted	0.41	Restricted	0.31
	permeability Too acid	0.22	permeability	İ
43B: Antigo	  Very limited		  Very limited	
11110190	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Too acid	0.08	Too acid	0.31
43C:				
	  Very limited	i	  Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	0.37	Slope	0.37
	Too acid	0.08	Too acid	0.31
43D:				
Antigo	Very limited		Very limited	
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	
	capacity		Slope	1.00
	Too acid	0.08	Too acid 	0.31
48A: Brill	 		   Vorus limited	
PIIII	Very limited   Filtering	1.00	Very limited   Filtering	1.00
	capacity	1	capacity	1
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Too acid	0.08	Too acid	0.31
63A:				
Crystal Lake	Very limited	İ	Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.41	Too acid	0.31
	permeability Too acid	0.08	Restricted permeability	0.31
		į	-	į
63B: Crystal Lake	  Very limited		  Very limited	
-	Depth to	0.99	Depth to	0.99
	saturated zone	İ	saturated zone	İ
	Restricted	0.41	Too acid	0.31
	permeability		Restricted	0.31
	Too acid	0.08	permeability	
63C:				
Crystal Lake	_		Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.41	Too acid	0.31
	permeability		Restricted	0.31
	Too acid	0.08	permeability Slope	0.04

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	-	Application of sewage sludg	re
	processing wast	e		
	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>
63E:	 	 	 	
Crystal Lake	  Very limited	i	  Very limited	
-	Slope	1.00	Slope	1.00
	Depth to	0.86	Depth to	0.86
	saturated zone	ĺ	saturated zone	İ
	Restricted	0.41	Too acid	0.31
	permeability		Restricted	0.31
	Too acid	0.08	permeability	
64A:	 		 	
Totagatic	Very limited	į	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Flooding	1.00	Flooding	1.00
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
Winterfield	  Very limited		  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	İ	capacity	İ
	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	Ì
	Flooding	1.00	Flooding	1.00
	Leaching	0.90	Droughty	0.52
	Droughty	0.52		
69B:	 		 	
Keweenaw	Somewhat limited	İ	Somewhat limited	Ì
	Too acid	0.22	Too acid	0.77
	Filtering	0.01	Filtering	0.01
	capacity		capacity	
Sayner	  Very limited	 	  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	i	capacity	i
	Droughty	0.99	Droughty	0.99
	Leaching	0.45	Too acid	0.77
	Too acid	0.22		į
Vilas	  Verv limited		  Very limited	
1111	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	Droughty	0.04
	Droughty	0.04		
69C:	 		 	
Keweenaw	  Somewhat limited		  Somewhat limited	
	Too acid	0.22	Too acid	0.77
	Slope	0.16	Slope	0.16
	Filtering	0.01	Filtering	0.01
	capacity	İ	capacity	İ

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast	-	Application of sewage sludg	re
	:		<u> </u>	1
	Rating class and   limiting features	Value	Rating class and   limiting features	Value
		İ		İ
69C: Sayner	 		 	
Sayner	Filtering	1.00	Very limited   Filtering	1.00
	capacity		capacity	
	Droughty	0.99	Droughty	0.99
	Leaching	0.45	Too acid	0.77
	Too acid	0.22	Slope	0.16
	Slope	0.16	 	
Vilas	  Very limited		  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Leaching	0.45	Too acid	0.31
	Slope	0.16	Slope	0.16
	Too acid	0.08	Droughty	0.04
	Droughty	0.04	 	
69E:				į
Keweenaw	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Too acid	0.22	Too acid	0.77
	Filtering   capacity	0.01	capacity	0.01
Sayner	  Very limited		  Very limited	
Sayner	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	1
	capacity		Slope	1.00
	Droughty	0.99	Droughty	0.99
	Leaching	0.45	Too acid	0.77
	Too acid	0.22		į
Vilas	  Very limited		  Very limited	
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	İ
	capacity		Slope	1.00
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	Droughty	0.04
	Droughty	0.04		
74B:				
Vilas	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Leaching	0.45	Too acid	0.31
	Too acid Droughty	0.08 0.04	Droughty 	0.04
74C:	 		 	
Vilas	  Very limited		  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Leaching	0.45	Slope	0.37
	!	0.37	Too acid	0.31
	Slope	0.37	100 acid	0.51
	Slope   Too acid	0.08	Droughty	0.04

Table 22b.--Agricultural Waste Management--Continued

and soil name	manure and food			e
į	processing wast	e	of sewage sludg	•
<u>'</u>	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
		İ		İ
74D:				ĺ
Vilas	Very limited		Very limited	
ļ	Slope	1.00	Filtering	1.00
!	Filtering	1.00	capacity	
	capacity		Slope	1.00
l l	Leaching	0.45	Too acid	0.31
ļ	Too acid Droughty	0.08	Droughty	0.04
ļ.	Diougney	0.01		
100B:				i
	Very limited	İ	  Very limited	İ
i	Filtering	1.00	Filtering	1.00
İ	capacity		capacity	ĺ
I	Droughty	0.77	Too acid	0.99
I	Too acid	0.50	Droughty	0.77
	Leaching	0.45		
100C:	Very limited		  Very limited	
Menahga	Filtering	1.00	Filtering	1.00
i	capacity	1	capacity	1
i	Too acid	0.50	Low adsorption	1.00
i	Leaching	0.45	Too acid	0.99
į	Droughty	0.40	Droughty	0.40
I	Slope	0.04	Slope	0.04
ļ				
100D:				ļ
Menahga	Very limited		Very limited	
ļ	Filtering	1.00	Filtering	1.00
· ·	capacity Slope	1.00	capacity Low adsorption	1.00
i	Too acid	0.50	Slope	1.00
i	Leaching	0.45	Too acid	0.99
i	Droughty	0.40	Droughty	0.40
İ				ĺ
127D:				
Amery	Very limited		Very limited	
	Slope	1.00	Slope	1.00
ļ	Too stony	0.50	Too acid	0.77
	Restricted permeability	0.41	Restricted permeability	0.31
· ·	Too acid	0.22	bermeapiricy	
i	100 4014			i
Rosholt	Very limited	İ	Very limited	i
į	Filtering	1.00	Filtering	1.00
I	capacity		capacity	
I	Dense layer	1.00	Slope	1.00
ļ	Slope	1.00	Droughty	0.40
	Too stony	0.50	Too acid	0.31
	Droughty	0.40		 
127E:				1
	Very limited		  Very limited	
· 4	Slope	1.00	Slope	1.00
Ï	Too stony	0.50	Too acid	0.77
į	Restricted	0.41	Restricted	0.31
i	permeability		permeability	
	Too acid	0.22		1

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	_	Application of sewage sludg	e
	processing wast	е	İ	
	Rating class and	Value	Rating class and	Value
	limiting features	<u>i</u>	limiting features	<u>i</u>
127E:				
Rosholt	Very limited	11 00	Very limited	
	Slope   Filtering	1.00  1.00	Filtering   capacity	1.00
	capacity	1	Slope	1.00
	Dense layer	1.00	Droughty	0.40
	Too stony	0.50	Too acid	0.31
	Droughty	0.40		
				[
156B:	 		 	
Magnor, very stony		1 00	Very limited	1 00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Dense layer	1.00	Too acid	0.85
	Restricted	0.74	Restricted	0.60
	permeability		permeability	
	Too stony	0.50		
	Too acid	0.27		i
	İ	į		i
Magnor	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Dense layer	1.00	Too acid	0.85
	Restricted	0.74	Restricted	0.60
	permeability		permeability	
	Too acid	0.27	 	
157B:			 	
Freeon, very stony	Very limited	į	Very limited	j
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Dense layer	1.00	Too acid	0.77
	Restricted	0.74	Restricted	0.60
	permeability		permeability	
	Too stony	0.50		
	Too acid	0.22	 	
Freeon	  Very limited	l I	  Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone	i	saturated zone	i
	Dense layer	1.00	Too acid	0.85
	Restricted	0.74	Restricted	0.60
	permeability		permeability	
	Too acid	0.27		
1570.			  -	
157C: Freeon, very stony	  Very limited	l I	  Very limited	
riscon, very scony	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	1	1.00	Too acid	0.77
	Dense layer		1	
	Restricted	0.74	Restricted	0.60
	-	0.74	Restricted permeability	0.60
	Restricted	0.74	'	0.60    0.04
	Restricted permeability	į	permeability	į

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast		Application of sewage sludg	re
	!		 	1 ** - 7
	Rating class and   limiting features	Value 	Rating class and   limiting features	Value
	İ		İ	İ
157C:				
Freeon	Very limited	1.00	Very limited	1 00
	Depth to saturated zone	1	Depth to saturated zone	1.00
	Dense layer	1.00	Too acid	0.85
	Restricted	0.74	Restricted	0.60
	permeability	İ	permeability	İ
	Too acid	0.27	Slope	0.04
	Slope	0.04		
160A:	 	l I	 	
Oesterle	  Very limited		  Very limited	1
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Too acid	0.22	Too acid Droughty	0.77
	Droughty 	0.09	Droughty	0.09
182B:		İ		
Padus	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Too acid	0.08	Too acid	0.31
182C:	 		 	
Padus	  Very limited	İ	  Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	0.37	Slope	0.37
	Too acid	0.08	Too acid	0.31
192A:	 	l I	 	
Worcester	  Very limited	İ	  Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Too acid	0.08	Too acid Droughty	0.31
	Droughty 	0.04	Droughty	0.04
193A:	İ	j	İ	İ
Minocqua	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.70	Ponding	1.00
	Too acid	0.02	Too acid	0.07
		ļ		!
215B: Pence	 	 	 	
191106	Very limited   Filtering	1.00	Very limited   Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.74
	Droughty	0.74	Too acid	0.31
	Too acid	0.08		

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	-	Application of sewage sludg	е
	processing wast			
	Rating class and   limiting features	Value	Rating class and limiting features	Value
		<u> </u>		
215C:		į		į
Pence	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.74
	Droughty Slope	0.74	Slope   Too acid	0.31
	Too acid	0.08		
		į		į
215D:		ĺ		İ
Pence	Very limited		Very limited	
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	
	capacity	1 00	Slope	1.00
	Dense layer Droughty	1.00  0.74	Droughty Too acid	0.74
	Too acid	0.08	100 acid	0.31
				i
315A:	İ	į		į
Rib	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	1 00	saturated zone Ponding	1 00
	Ponding Leaching	1.00  0.70	Too acid	1.00
	Too acid	0.08	100 aciu	
				i
337A:		ĺ		İ
Plover	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted permeability	0.89	Restricted permeability	0.78
	Too acid	0.08	Too acid	0.31
368B:		į		į
Mahtomedi	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	1.00	Droughty	1.00
	Leaching Too acid	0.45	Too acid	0.42
	100 acid 	0.11		
Cress	  Very limited		  Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity	į	capacity	į
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08		
368C:	 	1	 	
Mahtomedi	  Very limited		  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
		1.00	Droughty	1.00
	Droughty	1		1
	Droughty   Leaching	0.45	Too acid	0.42
		!		

Table 22b.--Agricultural Waste Management--Continued

Map symbol	Application of		Application	
and soil name	manure and food		of sewage sludg	е
	processing wast	е		
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
		ļ		ļ
368C:				
Cress	Very limited   Filtering	1.00	Very limited   Filtering	1 00
	capacity	1	capacity	1.00
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	Slope	0.04
	Slope	0.04		į
368D:				
Mahtomedi	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	1.00	Slope	1.00
	Droughty	1.00	Droughty Too acid	1.00
	Leaching Too acid	0.45	Too acid	0.42
	100 acid	0.11	 	
Cress	  Very limited	i	  Very limited	i
01022	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	i
	Slope	1.00	Slope	1.00
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08		
371A:		ļ		ļ
Croswell	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity Depth to	0.99	capacity Depth to	0.99
	saturated zone	10.33	saturated zone	0.99
	Droughty	0.67	Droughty	0.67
	Leaching	0.45	Too acid	0.31
	Too acid	0.08		i
		į		į
380B:		ĺ		İ
Cress	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	 	
Rosholt	  Very limited		  Very limited	
ROBIIOTE	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.33
	Droughty	0.33	Too acid	0.31
	Too acid	0.08		
380C:		ļ		ļ
Cress	_		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
		0 0	Clone	0.04
	Too acid	0.08	Slope	0.04

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	-	Application of sewage sludg	e
	processing wast		<u> </u>	
	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>
380C:	 	1	 	
	  Very limited	1	  Very limited	
NOBIIO10	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.33
	Droughty	0.33	Too acid	0.31
	Too acid	0.08	Slope	0.04
	Slope	0.04		İ
		ĺ		İ
380D:				
Cress	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	1.00	Slope	1.00
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08		ļ
		ļ		ļ
Rosholt	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	1 00	capacity Slope	1 00
	Dense layer Slope	1.00	Slope   Droughty	1.00
	Droughty	0.33	Too acid	0.31
	Too acid	0.08	100 acid	0.31
	100 4014		 	i
383B:		i		i
	  Very limited	i	  Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity	i	capacity	i
	Droughty	1.00	Droughty	1.00
	Leaching	0.45	Too acid	0.42
	Too acid	0.11		
383C:				
Mahtomedi	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	1.00	Droughty	1.00
	Leaching Too acid	0.45	Too acid	0.42
	Slope	0.11	Slope	10.04
	biope		 	
383D:		i		i
Mahtomedi	  Verv limited	i	  Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity		capacity	i
	Slope	1.00	Slope	1.00
	Droughty	1.00	Droughty	1.00
	Leaching	0.45	Too acid	0.42
	Too acid	0.11		
396B:				
Friendship			Very limited	!
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
		0.90	Droughty	0.90
	Droughty	:		
	Droughty   Leaching   Too acid	0.45	Too acid	0.21

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast	-	Application of sewage sludg	e
	:		 	1 ** - 1
	Rating class and   limiting features	Value	Rating class and   limiting features	Value
		i		i
396B:	j	į		į
Wurtsmith	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	!
	Depth to	0.99	Too acid	1.00
	saturated zone		Depth to	0.99
	Droughty	0.87	saturated zone	
	Too acid Leaching	0.78	Droughty	0.87
	Leaching	0.45	 	
Grayling	  Very limited	i	  Very limited	i
3	Filtering	1.00	Filtering	1.00
	capacity	i	capacity	i
	Droughty	1.00	Too acid	1.00
	Too acid	0.78	Droughty	1.00
	Leaching	0.45		
		ļ		!
397A:	 			-
Perchlake	Very limited   Filtering	1.00	Very limited   Filtering	1.00
	capacity	1	capacity	1
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Droughty	0.25	Too acid	0.77
	Too acid	0.22	Droughty	0.25
399B:	!			!
Grayling	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	11 00	capacity Too acid	1 00
	Droughty   Too acid	1.00  0.78	Droughty	1.00
	Leaching	0.45	Dioughty	1
				i
399C:		į		i
Grayling	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	1.00	Too acid	1.00
	Too acid	0.78	Droughty	1.00
	Leaching	0.45	Slope	0.04
	Slope	0.04	 	1
399D:	 	i	 	i
	  Very limited	i	  Very limited	i
-	Filtering	1.00	Filtering	1.00
	capacity	ĺ	capacity	İ
	Slope	1.00	Too acid	1.00
	Droughty	1.00	Slope	1.00
	Too acid	0.78	Droughty	1.00
	Leaching	0.45		
	I	1	 	
4057.	i			1
405A:	  Verv limited	 	  Verv limited	i
405A: Lupton	  Very limited   Depth to	    1.00	  Very limited   Depth to	1.00
	  Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	1.00
	Depth to	    1.00    1.00	Depth to	  1.00    1.00
	Depth to saturated zone	į	Depth to saturated zone	į

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food		Application of sewage sludg	e
	processing wast	е		
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
		İ		İ
405A:		ĺ		İ
Cathro	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
	Too acid	0.02	Too acid	0.07
Tawas	  Very limited	1	  Very limited	
1awas	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	i	saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
		ĺ		İ
406A:				
Loxley	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	1 00	saturated zone	11 00
	Ponding Too acid	1.00	Low adsorption Too acid	1.00
	Leaching	0.90	Ponding	1.00
407A:		İ		i
Seelyeville	Very limited	į	Very limited	İ
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
	Too acid	0.08	Too acid	0.31
Markey	  Very limited		  Very limited	
Markey	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	1
	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	i
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
410A:				
Seelyeville		1	Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding Too acid	1.00  0.31
				10.01
	Too acid	0.08		
Cathro	Too acid			
Cathro		      1.00	  Very limited   Depth to	    1.00
Cathro	Too acid    Very limited	<u>.</u> !	  Very limited	    1.00
Cathro	Too acid    Very limited   Depth to	<u> </u> 	  Very limited   Depth to	  1.00    1.00
Cathro	Too acid    Very limited   Depth to   saturated zone	    1.00	  Very limited   Depth to   saturated zone	į

Table 22b.--Agricultural Waste Management--Continued

Map symbol	Application of		Application	
and soil name	manure and food		of sewage sludg	е
	processing wast			1
	Rating class and   limiting features	Value	Rating class and   limiting features	Value
	IIMICING Teacures	<u>                                     </u>	IIMITCING Teacures	1
412A:	 	i i		1
Rifle	  Very limited	İ	  Very limited	i
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
	Filtering	0.01	Filtering	0.01
	capacity		capacity	
Tacoosh	  Very limited		  Very limited	
14000011	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
				!
415A:				
Greenwood	Very limited	1 00	Very limited   Depth to	1 00
	Depth to saturated zone	1.00	saturated zone	1.00
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching	0.90	Ponding	1.00
	İ			İ
439B:				!
Graycalm	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity Too acid	0.50	capacity Too acid	0.99
	Leaching	0.45	Droughty	0.25
	Droughty	0.25		
		j		į
Menahga	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Too acid Leaching	0.50	Low adsorption Too acid	1.00
	Droughty	0.45 0.39	Droughty	0.39
	Dioughty		Dioughey	
439C:		İ		i
Graycalm	Very limited		Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Too acid	0.50	Too acid	0.99
	Leaching Droughty	0.45	Droughty	0.25
	Slope	0.25	Slope	0.04
	Siope	0.04	 	1
Menahga	  Very limited	İ	  Very limited	
-	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Too acid	0.50	Low adsorption	1.00
	Leaching	0.45	Too acid	0.99
	Droughty	0.39	Droughty	0.39
	Slope	0.04	Slope	0.04

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food		Application of sewage sludg	е
	processing wast			
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
439D:	Į Ī		İ	
Graycalm	  Very limited	1	  Very limited	
Graycarm	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	1
	Slope	1.00	Slope	1.00
	Too acid	0.50	Too acid	0.99
	Leaching	0.45	Droughty	0.25
	Droughty	0.25	22049:107	
Menahga	  Very limited	i	  Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	1.00	Low adsorption	1.00
	Too acid	0.50	Slope	1.00
	Leaching	0.45	Too acid	0.99
	Droughty	0.39	Droughty	0.39
		i		i
441C:	İ	i		i
Freeon	Very limited	i	Very limited	i
	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	İ
	Dense layer	1.00	Too acid	0.85
	Restricted	0.74	Restricted	0.60
	permeability		permeability	
	Too stony	0.50	Slope	0.37
	Slope	0.37		
Cathro	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone	!	saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
	Too acid	0.02	Too acid	0.07
442C:	 		 	
Haugen	Very limited	10.00	Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone Restricted	0.89	saturated zone Too acid	0.91
	permeability	10.03	Restricted	0.78
	Too stony	0.50	permeability	10.78
		0.50	permeability	1
	· -	0 32	1	
	Too acid	0.32	 	
Greenwood	Too acid	0.32	    Very limited	
Greenwood	Too acid    Very limited		    Very limited   Filtering	      1.00
Greenwood	Too acid  Very limited Filtering	0.32      1.00	Filtering	      1.00
Greenwood	Too acid    Very limited   Filtering   capacity	    1.00	Filtering capacity	į
Greenwood	Too acid  Very limited  Filtering  capacity  Depth to		Filtering capacity Depth to	      1.00    1.00
Greenwood	Too acid    Very limited   Filtering   capacity	    1.00	Filtering capacity	į
Greenwood	Too acid  Very limited  Filtering  capacity  Depth to  saturated zone  Ponding	  1.00    1.00 	Filtering capacity Depth to saturated zone Low adsorption	  1.00    1.00
Greenwood	Too acid  Very limited  Filtering  capacity  Depth to  saturated zone	  1.00    1.00	Filtering capacity Depth to saturated zone	1.00
Greenwood	Too acid  Very limited  Filtering  capacity  Depth to  saturated zone  Ponding  Too acid	  1.00    1.00    1.00  0.94	Filtering capacity Depth to saturated zone Low adsorption Too acid	  1.00    1.00  1.00
Greenwood	Too acid  Very limited  Filtering  capacity  Depth to  saturated zone  Ponding  Too acid	  1.00    1.00    1.00  0.94	Filtering capacity Depth to saturated zone Low adsorption Too acid	  1.00    1.00  1.00
	Too acid  Very limited  Filtering  capacity  Depth to  saturated zone  Ponding  Too acid	  1.00    1.00    1.00  0.94	Filtering capacity Depth to saturated zone Low adsorption Too acid	  1.00    1.00  1.00
443D:	Too acid     Very limited   Filtering   capacity   Depth to   saturated zone   Ponding   Too acid   Leaching	  1.00    1.00    1.00  0.94	Filtering capacity Depth to saturated zone Low adsorption Too acid Ponding	  1.00    1.00  1.00
443D:	Too acid     Very limited   Filtering   capacity   Depth to   saturated zone   Ponding   Too acid   Leaching	  1.00  1.00    1.00  0.94  0.90	Filtering capacity Depth to saturated zone Low adsorption Too acid Ponding Very limited	  1.00    1.00  1.00  1.00
443D:	Too acid     Very limited   Filtering   capacity   Depth to   saturated zone   Ponding   Too acid   Leaching     Very limited   Slope	   1.00   1.00   1.00   0.94   0.90 	Filtering capacity Depth to saturated zone Low adsorption Too acid Ponding Very limited Slope	  1.00  1.00  1.00  1.00     
443D:	Too acid      Very limited     Filtering     capacity     Depth to     saturated zone     Ponding     Too acid     Leaching     Very limited     Slope     Too stony		Filtering capacity Depth to saturated zone Low adsorption Too acid Ponding Very limited Slope Too acid	  1.00  1.00  1.00  1.00        1.00  0.31

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast		Application of sewage sludg	e
	Rating class and	Value	Rating class and	Value
	limiting features	varue	limiting features	varue
	Ī	İ		İ
443D:				
Greenwood	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity Depth to	1.00	capacity Depth to	1.00
	saturated zone	1	saturated zone	1
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching	0.90	Ponding	1.00
4613				
461A: Bowstring	  Very limited	l I	  Very limited	
Donbering	Filtering	1.00	Filtering	1.00
	capacity		capacity	i
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Flooding	1.00	Flooding	1.00
	Low adsorption	1.00	Low adsorption	1.00
	Ponding	1.00	Ponding	1.00
484A:	 	 	 	
Greenwood	  Very limited	İ	  Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Too acid Leaching	0.94	Too acid Ponding	1.00
Beseman	Very limited		Very limited	İ
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption Too acid	1.00
	Too acid Leaching	0.94	Ponding	1.00
	Restricted	0.41	Restricted	0.31
	permeability	İ	permeability	
		ļ		
495B: Karlsborg	  Very limited		  Very limited	
karisborg	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	İ
	Restricted	1.00	Restricted	1.00
	permeability		permeability	
	Runoff	0.40	Too acid	0.77
	Too acid	0.22	 	1
Grettum	  Very limited	 	  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	İ	capacity	į
	Leaching	0.45	Too acid	0.85
		1		1
	Too acid Droughty	0.27	Droughty	0.02

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	-	Application of sewage sludge	
	processing wast			
	Rating class and limiting features	Value	Rating class and   limiting features	Value
495B:			   	
Perida	  Very limited	l I	  Very limited	1
101144	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Restricted	1.00	Restricted	1.00
	permeability	į	permeability	İ
	Too acid	0.27	Too acid	0.85
	Depth to	0.09	Depth to	0.09
	saturated zone		saturated zone	
495C:			 	
Karlsborg	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Restricted	1.00
	permeability Runoff	0.40	permeability Too acid	0.77
	Too acid	0.22	Slope	0.77
	100 acid		Blobe	
Grettum	Very limited	ĺ	Very limited	j
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Leaching	0.45	Too acid	0.85
	Too acid	0.27	Slope	0.04
	Slope	0.04	Droughty	0.02
	Droughty 	0.02	 	
Perida	  Very limited	į	  Very limited	j
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Restricted	1.00	Restricted	1.00
	permeability		permeability	
	Too acid	0.27	Too acid	0.85
	Depth to	0.09	Depth to	0.09
	saturated zone	0.04	saturated zone	0.04
	Slope 	0.04	Slope 	0.04
495D:	 		 	
Karlsborg	Very limited   Filtering	1.00	Very limited   Filtering	1.00
	_	1	capacity	1
	capacity   Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Restricted	1.00
	permeability	i	permeability	
	Slope	1.00	Slope	1.00
	Runoff	0.40	Too acid	0.77
Grettum	  Very limited		  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	İ	capacity	İ
	Slope	1.00	Slope	1.00
	Leaching	0.45	Too acid	0.85
	Too acid	0.27	Droughty	0.02

Table 22b.--Agricultural Waste Management--Continued

	1			
Map symbol and soil name	Application of manure and food		Application of sewage sludg	e
	processing wast	е		
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
495D:				
Perida	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Restricted	1.00	Restricted	1.00
	permeability		permeability	
	Slope	1.00	Slope	1.00
	Too acid	0.27	Too acid	0.85
	Depth to	0.09	Depth to	0.09
	saturated zone	1	saturated zone	-
4073	l I	1	 	
497A: Meenon	Trans limited	1	  Town limited	-
meenon	Very limited   Filtering	1.00	Very limited   Filtering	1.00
	capacity	1	capacity	1
	Restricted	1.00	Restricted	1.00
	permeability	1	permeability	1
	Depth to	1.00	Depth to	1.00
	saturated zone	1	saturated zone	1
	Too acid	0.08	Too acid	0.31
	Droughty	0.03	Droughty	0.03
515A:		i		i
Manitowish	Very limited	İ	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Depth to	0.86
	Depth to	0.86	saturated zone	
	saturated zone		Droughty	0.63
	Droughty	0.63	Too acid	0.31
	Too acid	0.08		
		!		!
521A:		-		-
Dody	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	1.00	capacity Depth to	1 00
	Depth to saturated zone	1.00	saturated zone	1.00
	Restricted	1.00	Low adsorption	1.00
	permeability	1	Restricted	1.00
	Ponding	1.00	permeability	1
	Leaching	0.50	Ponding	1.00
	Leaching		I onding	
524E:		i		i
Rock outcrop	Not rated	i	Not rated	i
_	İ	İ	İ	İ
Frogcreek	Very limited	İ	Very limited	İ
	Depth to	1.00	Depth to	1.00
		1	saturated zone	
	saturated zone			
	saturated zone Dense layer	1.00	Too acid	0.31
	!	  1.00  0.50	1	0.31
	Dense layer	!	Too acid	
	Dense layer Too stony Restricted permeability	0.50	Too acid	
	Dense layer   Too stony   Restricted	0.50	Too acid	
	Dense layer Too stony Restricted permeability Too acid	0.50	Too acid Restricted permeability	
Metonga	Dense layer Too stony Restricted permeability Too acid	0.50  0.41    0.08	Too acid Restricted permeability	0.31
Metonga	Dense layer   Too stony   Restricted   permeability   Too acid    Very limited   Slope	0.50   0.41   0.08 	Too acid Restricted permeability  Very limited Low adsorption	0.31            1.00
Metonga	Dense layer Too stony Restricted permeability Too acid Very limited Slope Too stony	0.50   0.41   0.08     1.00   0.47	Too acid Restricted permeability  Very limited Low adsorption Slope	0.31            1.00  1.00
Metonga	Dense layer Too stony Restricted permeability Too acid Very limited Slope Too stony Depth to bedrock	0.50   0.41   0.08     1.00   0.47   0.42	Too acid Restricted permeability  Very limited Low adsorption Slope Depth to bedrock	0.31            1.00  1.00  0.42
Metonga	Dense layer Too stony Restricted permeability Too acid Very limited Slope Too stony	0.50   0.41   0.08     1.00   0.47	Too acid Restricted permeability  Very limited Low adsorption Slope	0.31          1.00  1.00

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	-	Application of sewage sludg	e
	processing wast		<u> </u>	
	Rating class and   limiting features	Value	Rating class and   limiting features	Value
542B:				
Haugen, very stony	-		Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.89	Too acid Restricted	0.91
	permeability Too stony	0.50	permeability	0.76
	Too acid	0.30	permeability	
		İ		İ
Haugen	Very limited		Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.89	Too acid	0.91
	permeability		Restricted	0.78
	Too acid	0.32	permeability	
542C:		İ		
Haugen, very stony	Very limited		Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.89	Too acid	0.91
	permeability		Restricted	0.78
	Too stony	0.50	permeability	0.04
	Too acid	0.32	Slope 	0.04
Haugen	Very limited		Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.89	Too acid	0.91
	permeability		Restricted	0.78
	Too acid	0.32	permeability Slope	0.04
	Slope		Blobe	
543B:	İ	į		İ
Anigon	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Too acid	0.08	Too acid	0.31
543C2:				
Anigon	Very limited	į	Very limited	į
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Too acid	0.08	Too acid	0.31
	Slope	0.04	Slope	0.04
544F:	 		[ 	
Menahga	  Very limited	İ	  Very limited	İ
-	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	
	capacity		Low adsorption	1.00
	Too acid	0.50	Slope	1.00
	•			
	Leaching   Droughty	0.45	Too acid Droughty	0.99

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast	l-	Application of sewage sludg		
	Rating class and	Value	Rating class and	Value	
	limiting features		limiting features		
		ļ			
544F: Mahtomedi	  Vorus limited		  Vorus limited		
Maircomedi	Slope	1.00	Very limited   Filtering	1.00	
	Filtering	1.00	capacity		
	capacity	İ	Slope	1.00	
	Droughty	1.00	Droughty	1.00	
	Leaching	0.45	Too acid	0.42	
	Too acid	0.11			
555A:					
Fordum	  Very limited	1	  Very limited		
2 0 2 0 0 0 1	Filtering	1.00	Filtering	1.00	
	capacity	İ	capacity	i	
	Depth to	1.00	Depth to	1.00	
	saturated zone		saturated zone	İ	
	Flooding	1.00	Flooding	1.00	
	Ponding	1.00	Ponding	1.00	
	Runoff	0.40			
574B:	 	l I	 		
Sayner	  Very limited		  Very limited		
-	Filtering	1.00	Filtering	1.00	
	capacity	İ	capacity	İ	
	Droughty	0.99	Droughty	0.99	
	Leaching	0.45	Too acid	0.77	
	Too acid	0.22			
574C:	 		 		
Sayner	  Very limited		  Very limited	i	
	Filtering	1.00	Filtering	1.00	
	capacity	i	capacity	i	
	Droughty	0.99	Droughty	0.99	
	Leaching	0.45	Too acid	0.77	
	Slope	0.37	Slope	0.37	
	Too acid	0.22	  -		
574E:	 		 		
Sayner	Very limited	j	Very limited	į	
	Slope	1.00	Filtering	1.00	
	Filtering	1.00	capacity		
	capacity		Slope	1.00	
	Droughty	0.99	Droughty	0.99	
	Leaching   Too acid	0.45	Too acid	0.77	
	100 acid	0.22	 		
579B:		İ	İ	i	
Parkfalls	Very limited	j	Very limited	į	
	Depth to	1.00	Depth to	1.00	
	saturated zone		saturated zone		
	Dense layer	1.00	!	0.77	
	Droughty	0.61		0.61	
	Too stony Restricted	0.50	•	0.31	
	permeability	10.41	Depth to dense	0.20	
	permeabring		material		
	i de la companya companya de la co	i	İ	İ	
		1			
600A:	 		ļ	į	
600A: Haplosaprists	    Not rated		  Not rated	<u> </u>	
	İ	 	  Not rated    Not rated	 	

Table 22b.--Agricultural Waste Management--Continued

Map symbol	Application of		Application	
and soil name	manure and food		of sewage sludg	e
	processing wast			
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
615B:			 	
Cress	  Very limited		  Very limited	
Cless	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08		
		i		i
615C:		İ		İ
Cress	Very limited	İ	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	Slope	0.04
	Slope	0.04		
615D:				
Cress	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	1.00	Slope	1.00
	Droughty	0.60	Droughty Too acid	0.60
	Leaching Too acid	0.45	Too acid	0.31
	Too acid	10.08	 	
623A:		l	 	
Capitola	  Very limited		  Very limited	
capitola	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.70	Ponding	1.00
	Too stony	0.50	Depth to dense	0.46
	Depth to dense	0.46	material	İ
	material	İ	Too acid	0.31
		İ		İ
624A:				
Ossmer	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Too acid	0.08	Too acid	0.31
6203				
632A:				
Aftad	Depth to	:	Very limited	0.99
	saturated zone	0.99	Depth to saturated zone	0.99
	Restricted	0.41	Too acid	0.31
	permeability	0.41	Restricted	0.30
	Too acid	0.08	permeability	0.50
632B:		i		i
Aftad	  Very limited	i	  Very limited	i
	Depth to	0.99	Depth to	0.99
	saturated zone	i	saturated zone	i
	Restricted	0.41	Too acid	0.31
	permeability	i	Restricted	0.30
		10.00		1
	Too acid	0.08	permeability	

Table 22b.--Agricultural Waste Management--Continued

632C:       Aftad	limiting features  Very limited  Depth to	Value	   Rating class and   limiting features	Value
1	limiting features  Very limited  Depth to	Value 		Value 
1	Depth to	 		
	Depth to			
	Depth to		  Very limited	l
	-	0.99	Depth to	0.99
	saturated zone		saturated zone	
į	Restricted	0.41	Too acid	0.31
i	permeability	į	Restricted	0.30
	Too acid	0.08	permeability	ĺ
	Slope	0.04	Slope	0.04
633F:		 	 	l I
	Very limited		  Very limited	
I	Slope	1.00	Filtering	1.00
I	Filtering	1.00	capacity	
ļ	capacity		Slope	1.00
ļ	Dense layer	1.00	Droughty	0.74
ļ	Droughty	0.74	Too acid	0.31
	Too acid	0.08	]	
Padus	Very limited		  Very limited	
İ	Slope	1.00	Filtering	1.00
İ	Filtering	1.00	capacity	İ
ĺ	capacity	ĺ	Slope	1.00
	Too acid	0.08	Too acid	0.31
C10D:			l	
648B:   Sconsin	Very limited	l I	  Very limited	l I
sconsin	Depth to	1.00	Depth to	1.00
i	saturated zone		saturated zone	
i	Depth to dense	0.54	Depth to dense	0.54
į	material	į	material	İ
j	Too acid	0.08	Too acid	0.31
670C:		 	l	l i
	Somewhat limited	 	  Somewhat limited	l I
	Leaching	0.45	Too acid	0.77
İ	Slope	0.37	Slope	0.37
į	Too acid	0.22	Filtering	0.01
I	Filtering	0.01	capacity	
	capacity			
   Pence	Very limited	 	  Very limited	 
	Filtering	1.00	Filtering	1.00
i	capacity		capacity	
İ	Dense layer	1.00	Droughty	0.74
İ	Droughty	0.74	Slope	0.37
ĺ	Slope	0.37	Too acid	0.31
	Too acid	0.08		
670E:			 	
	Very limited	 	  Very limited	 
	Slope	1.00	Slope	1.00
	Leaching	0.45	Too acid	0.77
ľ	Too acid	0.22	Filtering	0.01
j	Filtering	0.01	capacity	İ
j	capacity			

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	-	Application of sewage sludg	e
	processing wast			
	Rating class and   limiting features	Value	Rating class and   limiting features	Value
570E:				
Pence	Very limited		Very limited	
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	
	capacity	1 00	Slope	1.00
	Dense layer	1.00  0.74	Droughty Too acid	0.74
	Droughty   Too acid	0.74	100 acid	0.31
	100 acid	0.08	 	
571B:		į		İ
Spoonerhill, stony	Very limited		Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Leaching	0.45	Too acid	0.31
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
	Too acid	0.08	Droughty	0.04
	Droughty	0.04	Filtering	0.01
	 		capacity	
Spoonerhill	  Very limited		  Very limited	
_	Depth to	0.99	Depth to	0.99
	saturated zone	İ	saturated zone	İ
	Leaching	0.45	Too acid	0.31
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
	Too acid	0.08	Droughty	0.04
	Droughty	0.04	Filtering	0.01
			capacity	
580B:			 	
Stanberry, stony	  Very limited	İ	  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Low adsorption	1.00
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Too stony	0.50	Restricted	0.31
	Restricted	0.41	permeability	
				0.06
	permeability		Droughty	10.00
Pence, stony	į			
Pence, stony	  Very limited	      1.00	  Very limited	İ
Pence, stony	  Very limited   Filtering	      1.00	  Very limited   Filtering	      1.00
Pence, stony	  Very limited	      1.00    1.00	  Very limited	İ
Pence, stony	  Very limited   Filtering   capacity	İ	  Very limited   Filtering   capacity	    1.00
Pence, stony	  Very limited   Filtering   capacity   Dense layer	1.00	  Very limited   Filtering   capacity   Droughty	  1.00    0.74
Pence, stony	  Very limited   Filtering   capacity   Dense layer   Droughty	  1.00  0.74	  Very limited   Filtering   capacity   Droughty	  1.00    0.74
	  Very limited   Filtering   capacity   Dense layer   Droughty   Too stony	  1.00  0.74  0.50	  Very limited   Filtering   capacity   Droughty	  1.00    0.74
- 583A:	Very limited   Filtering   capacity   Dense layer   Droughty   Too stony   Too acid	  1.00  0.74  0.50	   Very limited   Filtering   capacity   Droughty   Too acid	  1.00    0.74
	Very limited   Filtering   capacity   Dense layer   Droughty   Too stony   Too acid	  1.00  0.74  0.50  0.08	   Very limited   Filtering   capacity   Droughty   Too acid 	  1.00    0.74  0.31   
83 <b>A</b> :	Very limited   Filtering   capacity   Dense layer   Droughty   Too stony   Too acid     Very limited   Filtering	  1.00  0.74  0.50	Very limited   Filtering   capacity   Droughty   Too acid	  1.00    0.74
- 583A:	Very limited   Filtering   capacity   Dense layer   Droughty   Too stony   Too acid     Very limited   Filtering   capacity	  1.00  0.74  0.50  0.08        1.00	Very limited   Filtering   capacity   Droughty   Too acid	  1.00  0.74  0.31     
- 583A:	Very limited   Filtering   capacity   Dense layer   Droughty   Too stony   Too acid     Very limited   Filtering	  1.00  0.74  0.50  0.08	Very limited   Filtering   capacity   Droughty   Too acid	  1.00    0.74  0.31   
- 583A:	Very limited   Filtering   capacity   Dense layer   Droughty   Too stony   Too acid     Very limited   Filtering   capacity   Depth to	  1.00  0.74  0.50  0.08        1.00	Very limited   Filtering   capacity   Droughty   Too acid	  1.00  0.74  0.31     

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food		Application of sewage sludg	re
	processing wast			1
	Rating class and   limiting features	Value	Rating class and   limiting features	Value
		i		<u> </u>
706A:	j	į	İ	İ
Winterfield	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Flooding   Leaching	1.00	Flooding   Droughty	1.00
	Droughty	0.20	Diougney	
			i İ	i
Totagatic	Very limited	Ì	Very limited	Ì
	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Flooding	1.00	Flooding	1.00
	Ponding	1.00	Ponding	1.00
	Runoff	0.40	Too acid	0.42
724A:	 		 	
Rib	  Very limited	İ	  Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity	į	capacity	İ
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00
	Leaching	0.70	Too acid	0.31
	Too acid	0.08		
Rock outcrop	  Not rated 	   	  Not rated 	
726B:		İ		i
Sissabagama	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Restricted	0.89	Depth to	0.86
	permeability		saturated zone	
	Depth to	0.86	Restricted	0.78
	saturated zone	0.45	permeability Too acid	0.31
	Too acid	0.43	100 acid	10.31
				İ
733A:	į	į	İ	į
Wozny	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.70	Ponding	1.00
	Too stony Too acid	0.50	Too acid	0.31
	100 acid	0.08	capacity	0.01
		İ		i
771A:	İ	İ	İ	j
Lenroot		[	Very limited	!
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Droughty	0.89	Droughty	0.89
	Toachine	0 4 5	Too agid	0 40
	Leaching Too acid	0.45	Too acid	0.42

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food		Application of sewage sludg	re
	processing wast			
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
827A:	 		 	
Scoba	  Very limited	İ	  Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Droughty	0.26	Too acid	0.31
	Too acid	0.08	Droughty	0.26
853C:	 		 	
	  Very limited		  Very limited	
3	Depth to	1.00	Depth to	1.00
	saturated zone	į	saturated zone	İ
	Dense layer	1.00	Too acid	0.31
	Too stony	0.50	Restricted	0.31
	Restricted	0.41	permeability	
	permeability			
	Too acid	0.08		
Ctionatt	  Tom: limited		  Town limited	
Stinnett	Depth to	1.00	Very limited   Depth to	1.00
	saturated zone	1	saturated zone	1
	Too stony	0.50	Too acid	0.31
	Restricted	0.41	Restricted	0.31
	permeability	i	permeability	İ
	Too acid	0.08		
Wozny	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone	1 00	saturated zone	1 00
	Ponding Leaching	1.00  0.70	Low adsorption Ponding	1.00  1.00
	Too stony	0.70	Too acid	0.31
	Too acid	0.08	Filtering	0.01
			capacity	
	İ	į	İ	j
856B:				
Stinnett	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Too stony Restricted	0.50	Too acid	0.31
	!	0.41	!	0.31
	permeability Too acid	0.08	permeability	
			! 	
857B:		į		İ
Frogcreek	Very limited		Very limited	
	Depth to	1.00		1.00
	saturated zone	[	saturated zone	
	Dense layer	1.00	•	0.31
	Too stony	0.50	Restricted	0.31
	Restricted permeability	0.41	permeability	I
	Too acid	0.08	 	
	I .	1	I .	1

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast	-	   Application   of sewage sludg 	re
	Rating class and	Value	Rating class and limiting features	Value
	limiting features	<u> </u>	limiting reatures	1
857C:		İ		İ
Frogcreek	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Dense layer	1.00	Too acid	0.31
	Too stony Restricted	0.50	Restricted permeability	0.31
	permeability	10.41	Slope	0.16
	Slope	0.16	blope	
				i
873B:	j	į		j
Stanberry	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Low adsorption	1.00
	Depth to saturated zone	0.99	Depth to saturated zone	0.99
	Too stony	0.50	Restricted	0.31
	Restricted	0.41	permeability	0.51
	permeability		Droughty	0.06
	j	į		İ
873C:				
Stanberry	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer Depth to	1.00	Low adsorption Depth to	1.00  0.99
	saturated zone	10.99	saturated zone	10.99
	Too stony	0.50	Slope	0.37
	Restricted	0.41	Restricted	0.31
	permeability	į	permeability	İ
873D:		1		
Stanberry	Very limited		Very limited	
	Slope	1.00	Filtering	1.00
	Filtering   capacity	1.00	capacity  Low adsorption	1.00
	Dense layer	1.00	Slope	1.00
	Depth to	0.99	Depth to	0.99
	saturated zone	į	saturated zone	İ
	Too stony	0.50	Restricted	0.31
	!		permeability	
905A:				
Cublake	Filtering	1.00	Very limited   Filtering	1.00
	capacity	1	capacity	
	Dense layer	1.00		0.86
	Depth to	0.86	saturated zone	İ
	saturated zone		Too acid	0.77
	Too acid	0.22	Droughty	0.01
	Droughty	0.01		ļ
0063		1		
926A:	  Vorus limited	1	   Worse limited	
Flink	Very limited   Filtering	1.00	Very limited   Filtering	1.00
	capacity		capacity	
	Depth to	1.00		1.00
	saturated zone	į	saturated zone	İ
	Too acid	0.22	Too acid	0.77

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast		Application of sewage sludg	re
	Rating class and	Value	Rating class and	Value
	limiting features	varue	limiting features	varue
943D: Stanberry	  Very limited		  Very limited	
beamberry	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	1.00	Low adsorption	1.00
	Dense layer	1.00	Slope	1.00
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Too stony	0.50	Restricted permeability	0.31
			permeability	
Greenwood	  Very limited	į	  Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching	0.90	Ponding	1.00
	Filtering   capacity	0.01	Filtering   capacity	10.01
	capacity		capacity	
948A:		į		j
Billyboy	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone Too acid	0.08	saturated zone Too acid	0.31
	100 actu		100 actu	
970C:		į		
Keweenaw	Somewhat limited		Somewhat limited	
	Leaching	0.45	Too acid	0.77
	Slope	0.37	Slope	0.37
	Too acid Filtering	0.22	Filtering   capacity	0.01
	capacity	0.01	capacity	
		İ		İ
Pence	Very limited	İ	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.74
	Droughty Too stony	0.74	Slope   Too acid	0.37
	Slope	0.37	100 actu	
	_	į		į
Greenwood	Very limited	İ	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to saturated zone	1.00
	saturated zone	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching	0.90	Ponding	1.00
	į	İ	-	į
970E:				
Keweenaw	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Leaching Too acid	0.45	Too acid Filtering	0.77
	Too acid   Filtering	0.22	Filtering   capacity	10.01
	capacity		capacity	

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	l-	Application of sewage sludg	re
	processing wast			
	Rating class and   limiting features	Value	Rating class and limiting features	Value
970E:			 	
	  Very limited	i	  Very limited	İ
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	j
	capacity		Slope	1.00
	Dense layer	1.00	Droughty	0.74
	Droughty	0.74	Too acid	0.31
	Too stony	0.50		
Greenwood	Very limited	İ	  Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	1 00	saturated zone	1 00
	Ponding   Too acid	1.00  0.94	Low adsorption Too acid	1.00
	Leaching	0.94	Ponding	1.00
	leading			
1070C: Fremstadt	  Comowhat limited		  Somewhat limited	
riems cadc	Leaching	0.45	Too acid	0.31
	Slope	0.16	Slope	0.16
	Too acid	0.08	Filtering	0.01
	Filtering   capacity	0.01	capacity	į Į
Cress	  Very limited		  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	İ	capacity	
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	Slope 	0.04
	į -	į		į
1070D: Fremstadt	  Verv limited		  Very limited	
	Slope	1.00	Slope	1.00
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	Filtering	0.01
	Filtering	0.01	capacity	
	capacity		 	
Cress	  Very limited		  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	1.00	Slope	1.00
	Droughty	0.60	Droughty	0.60
	Leaching Too acid	0.45	Too acid	0.31
	į	į		į
1080B: Spoonerhill	  Vorus limited		  Vorus limited	
Phooueruttt	Depth to	0.99	Very limited   Depth to	0.99
	saturated zone		saturated zone	
	Leaching	0.45	Too acid	0.31
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
	Too acid	0.08	Droughty	0.04
	Droughty	0.04	Filtering	0.01
	1	1	capacity	1

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	_	Application	
and soil name	processing wast		of sewage sludg	е
	·		Doting along and	177010
	Rating class and   limiting features	Value	Rating class and   limiting features	Value
		1		<del>                                     </del>
1080B:		İ		İ
Spoonerhill, stony	Very limited	İ	Very limited	j
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Leaching	0.45	Too acid	0.31
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
	Too acid	0.08	Droughty	0.04
	Droughty	0.04	Filtering	0.01
	 	1	capacity	
Cress	  Very limited	i	  Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity	İ	capacity	j
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08		
1653C:				
Stanberry	  Very limited	l I	  Very limited	
Stamberry	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	1
	Dense layer	1.00	Low adsorption	1.00
	Depth to	0.99	Depth to	0.99
	saturated zone	i	saturated zone	i
	Too stony	0.50	Restricted	0.31
	Restricted	0.41	permeability	
	permeability		Droughty	0.06
Parkfalls	  Very limited	 	  Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Dense layer	1.00	Too acid	0.77
	Droughty	0.61	Droughty	0.61
	Too stony	0.50	Restricted	0.31
	Restricted	0.41	permeability	
	permeability		Depth to dense	0.20
			material	
Wozny	  Very limited	1	  Very limited	
Nozny	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
		1.00	:	1.00
	Leaching		Ponding	1.00
	Too stony	0.50	Too acid	0.31
	Too acid	0.08	Filtering	0.01
			capacity	
2015				
2015: Pits	  Not_rated		  Not rated	
FILS	NOC TALEG	 	NOC TALEG	I
2050:	! 		! 	
Landfill	Not rated	İ	  Not rated	i
		İ		İ

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food		Application of sewage sludg	re
did boll name	processing wast		Of Beauge Blues	, C
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
3011A:				
Barronett	Very limited		Very limited	1 00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
	Leaching	0.70	Too acid	0.31
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
	Too acid	0.08	i	İ
3125A:			l	
Meehan	  Very limited		  Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	i
	Depth to	1.00		1.00
	saturated zone	İ	saturated zone	İ
	Droughty	0.94	Droughty	0.94
	Leaching	0.45	Too acid	0.85
	Too acid	0.27		
3126A:			 	
Wurtsmith	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	0.99	Too acid	1.00
	saturated zone		Depth to	0.99
	Droughty	0.85	saturated zone	
	Too acid	0.78	Droughty	0.85
	Leaching	0.45	 	
3276A:	į	į		į
Au Gres	Very limited	1	Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone Droughty	0.29	saturated zone Low adsorption	1.00
	Droughty	0.29	Droughty	0.29
		İ		
3312B: Glendenning, very			 	
stony	  Verv limited		  Very limited	
beeny	Depth to	1.00		1.00
	saturated zone		saturated zone	
	Too stony	0.50	•	0.31
	Restricted	0.41	Restricted	0.31
	permeability	į	permeability	İ
	Too acid	0.08		
Glendenning	  Very limited		  Very limited	
-	Depth to	1.00	: -	1.00
	saturated zone	İ	saturated zone	İ
	Restricted	0.41	Too acid	0.31
	Restricted permeability	0.41	Too acid   Restricted	0.31

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast		Application of sewage sludg	re
	Rating class and	Value	Rating class and	Value
	limiting features	varue	limiting features	value
22263				
3336A: Fenander	  Very limited	1	  Very limited	
renander	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00
	Leaching	0.70	Restricted	0.31
	Restricted	0.41	permeability	
	permeability		 	
3403A:		İ		
Loxley	Very limited	İ	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching	0.90	Ponding	1.00
		[		
Beseman	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching	0.90	Ponding	1.00
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
Dawson	  Very limited		  Very limited	1
245011	Filtering	1.00	Filtering	1.00
	capacity	į	capacity	İ
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding   Too acid	1.00	Low adsorption Too acid	1.00
	Leaching	0.94	Ponding	1.00
3424C:		[	[	
Frogcreek	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Dense layer	1.00	Too acid	0.31
	Too stony	0.50	Restricted	0.31
	Restricted	0.41	permeability	j
	permeability			
	Too acid	0.08		
Magroc	  Very limited		  Very limited	1
	Depth to	1.00	Depth to	1.00
	saturated zone	į	saturated zone	İ
	Too stony	0.50	Low adsorption	1.00
	Too acid	0.08	Too acid	0.31
Stinnett	  Verv limited		  Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Too stony	0.50	Too acid	0.31
	Restricted	0.41	Restricted	0.31
	Restricted permeability Too acid	0.41	Restricted   permeability	0.31

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast	l-	Application of sewage sludg	e
	Rating class and		Rating class and	Value
	limiting features		limiting features	
3424C:				
Rock outcrop	  Not rated 	   	  Not rated 	
3446A:		į		į
Newson	<u>-</u>	1	Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	ļ	saturated zone	!
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.62	Too acid	1.00
	Runoff	0.40	Ponding	1.00
3448B:				
Grettum	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Too acid	0.27	Too acid	0.85
	Droughty	0.02	Droughty	0.02
3448C:	 		 	
Grettum	  Very limited	i	  Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity	i	capacity	i
	Too acid	0.27	Too acid	0.85
	Slope	0.04	Slope	0.04
	Droughty	0.02	Droughty	0.02
3516A:	 		 	
	  Very limited		  Very limited	1
DIIMIGNO	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	1
	Depth to	0.86	Depth to	0.86
	saturated zone	1	saturated zone	
	Too acid	0.11	Too acid	0.42
	Droughty	0.07	Droughty	0.07
3629B:				
Perida	  Very limited		  Very limited	1
relida	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	1
	Restricted	1.00	Restricted	1.00
	permeability	1		1
		10 45	permeability Too acid	0.85
	Leaching   Too acid	0.45	1	0.09
		0.27	Depth to saturated zone	10.09
	Depth to saturated zone		sacurated zone	
M. W.				
M-W: Miscellaneous water	  Not rated		  Not rated	
W:	[ 		[ 	
Water	_	i	Not rated	1

# Soil Properties

Data relating to soil properties are collected during the course of the soil survey. Soil properties are ascertained by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

### **Engineering Index Properties**

Table 23 gives the engineering classifications and the range of index properties for the layers of each soil in the survey area.

*Depth* to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly." Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group

index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field

Liquid limit and plasticity index (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

The estimates of particle-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is generally omitted in the table.

## **Physical Properties**

Table 24 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

*Depth* to the upper and lower boundaries of each layer is indicated.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In table 24, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrinkswell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at ¹/₃- or ¹/₁₀-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity ( $K_{sat}$ ). The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field,

particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at <sup>1</sup>/<sub>3</sub>- or <sup>1</sup>/<sub>10</sub>-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In table 24, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in table 24 as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of several factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

*Erosion factor Kw* indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

*Erosion factor Kf* indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook" (USDA, NRCS).

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer,

the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

### **Chemical Properties**

Table 25 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

*Depth* to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen fertilizer into calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

#### **Water Features**

Soil moisture status is an estimate of the fluctuating water content in a soil. It greatly influences vegetation type and plant growth; physical properties of soils, such as permeability, workability, strength, linear extensibility, and frost action; and chemical interactions and transport. Many other properties, qualities, and interpretations also are affected. Soil moisture status is important in the classification of soils, wetland, and habitat.

Table 26 gives estimates of soil moisture for each component of a map unit at various depths for every month of the year. The depths displayed are representative values that are indicative of conditions that occur most commonly. *Dry* indicates a moisture condition under which most plants (especially crops) cannot extract water for growth. *Moist* indicates a moisture condition under which soil water is most readily available for plant growth. *Wet* indicates a condition under which water will stand in an unlined hole or at least a condition under which the soil is too wet for the growth of most agricultural species. A moisture status of 4.0-6.7 (wet) indicates that most of the time the component is saturated at some depth between 4.0 feet and 6.7 feet during the month designated. In some years the soil may be saturated at a depth of less than 4.0 feet or more than 6.7 feet; however, field observations indicate that the soil will be saturated between these depths in most years. In the summer, the soil may show the effects of drying plus intermittent rains that result in a moist or wet layer over a dry layer that gets moist or wet again.

In table 26, *hydrologic soil groups* are groups of soils that, when saturated, have the same runoff potential under similar storm and ground cover conditions. The soil properties that affect the runoff potential are those that influence the minimum rate of infiltration in a bare soil after prolonged wetting and when the soil is not frozen. These

properties include the depth to a zone in which the soil moisture status is wet, the infiltration rate, permeability after prolonged wetting, and the depth to a very slowly permeable horizon or horizons. The influences of ground cover and slope are treated independently and are not taken into account in hydrologic soil groups.

In the definitions of the hydrologic soil groups, the infiltration rate is the rate at which water enters the soil at the surface and is controlled by surface conditions. The transmission rate is the rate at which water moves through the soil and is controlled by properties of the soil horizons.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist chiefly of very deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have a moderately fine to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a horizon or horizons that impede the downward movement of water or soils that have a moderately fine or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clayey soils that have a high linear extensibility; soils that have a zone, high in the profile, in which the soil moisture status is wet on a permanent basis; soils that have a claypan or clay horizon or horizons at or near the surface; and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Flooding, the temporary covering of the soil surface by flowing water, is caused by overflow from streams or by runoff from adjacent slopes. Shallow water standing or flowing for short periods after rainfall or snowmelt is not considered flooding. Standing water in marshes and swamps or in closed depressions is considered to be ponding.

Table 27 gives estimates of the frequency and duration of flooding for every month of the year. Flooding frequency is the annual probability of a flood event expressed as a class. None indicates no reasonable possibility of flooding (the chance of flooding is nearly 0 percent in any year, or flooding is likely less than once in 500 years). Very rare indicates that flooding is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year, or flooding is likely less than once in 100 years but more than once in 500 years). Rare indicates that flooding is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year, or flooding is likely 1 to 5 times in 100 years). Occasional indicates that flooding occurs infrequently under usual weather conditions (the chance of flooding is 5 to 50 percent in any year, or flooding is likely 5 to 50 times in 100 years). Frequent indicates that flooding is likely to occur often under usual weather conditions (the chance of flooding is more than 50 percent in any year, or flooding is likely more than 50 times in 100 years; but the chance of flooding is less than 50 percent in all months in any year). Very frequent indicates that flooding is likely to occur very often under usual weather conditions (the chance of flooding is more than 50 percent in all months of any year).

Flooding duration is the average duration of inundation per flood occurrence expressed as a class. *Extremely brief* is 0.1 hour to 4.0 hours; *very brief* is 4 to 48 hours; *brief* is 2 to 7 days; *long* is 7 to 30 days; and *very long* is more than 30 days. About two-thirds to three-fourths of all flooding occurs during the stated period.

The information on flooding is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and level of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

*Ponding* is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation.

Table 28 gives estimates of the frequency, duration, and depth of ponding for every month of the year. The depths displayed are representative values that are indicative of conditions that occur most of the time.

Ponding frequency is the number of times ponding occurs over a period of time. *None* indicates no reasonable possibility of ponding (the chance of ponding is nearly 0 percent in any year). *Rare* indicates that ponding is unlikely but possible under unusual weather conditions (the chance of ponding ranges from nearly 0 percent to 5 percent in any year, or ponding is likely 0 to 5 times in 100 years). *Occasional* indicates that ponding is expected infrequently under usual weather conditions (the chance of ponding ranges from 5 to 50 percent in any one year, or ponding is likely 5 to 50 times in 100 years). *Frequent* indicates that ponding is likely to occur under usual weather conditions (the chance of ponding is more than 50 percent in any year, or ponding is likely more than 50 times in 100 years).

Ponding duration is the average length of time of the ponding occurrence. It is expressed as *very brief* (less than 2 days), *brief* (2 to 7 days), *long* (7 to 30 days), and *very long* (more than 30 days).

#### **Soil Features**

Table 29 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A restrictive layer is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a zone of saturation close to the surface in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate,* or *high,* is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Table 23.--Engineering Index Properties

(Absence of an entry indicates that data were not estimated)

			Classif	Classification	Fragments	ents	Per	Percentage pass	pass
Map symbol and	Depth	USDA texture			>10	3-10	O1	sieve number-	ımber-
soil name			Unified	AASHTO	Ø	inches	4	10	40
	ų				Pot	Pct			
3A:									
Totagatic	0 - 4	Muck	PT	A-8	0	0	100	100	
	4-8	Loamy fine	SM	A-2	0	0	100	100	50-80
	_	sand, loamy		_	_	_	_		
		sand, fine			_				
		sand, sand			_				
	8-17	Fine sand,	SM	A-2	0	0	100	100	50-80
					_				
		sand, loamy			_				
		fine sand							
	17-28	Fine sand,	SM	A-2, A-3	0	0	100	100	50-80
		sand, mucky							
						-		•	
	28-46		WS _	A-2, A-3	0	0	100	100	50-80
		sand, mucky							
	1			, r	-		0	6	0
	46-70	U	M.S.	A-2, A-3	o 	>	00T	0 O T	08-06
		sand, loamy							
		01							
	70-80	Sand, coarse	SM	A-2, A-3	0	0	100	100	50-80
					_				
		sand, loamy							
		sand, loamy							
		fine sand							
, , , , , , , , , , , , , , , , , , ,	0	7.5	E	0			0	6	
DOWN CT TITLE	2010	Fine gand	מא מס-מא	0 - K	o c	o c	0 0	0 0	1 0 1 0
	# 0 0	rine sand,		7-4	> _	>	0	) H	000
		sand, loamy							
	47-80	Muck	PT	A-8	0	0	100	100	-
	; ;		ı <u>ı</u>	· <u>-</u>	,	,			
Ausable	0-10	_	PT	A-8	0	0	100	100	
	10-60	Sand	SM	A-2-4, A-3	0	0	90-100	90-100 85-100	55-75

Table 23. -- Engineering Index Properties -- Continued

Map symbol	Depth	USDA texture	Classin	Classification	Fragments	ents	Per	Percentage pass sieve number-	pass mber-
and			7		>10	3-10		6	
soll name			Unitied	AASHTO	inches inches	Inches	41	2	0 #
	п				Pct	Pct			
22A:								1	7
COMBCOCK	0 C	Silt loam	T. CL-MI. CL	CL A-4, A-0		o c	98-100 95-100 90-10	95-100	90-10
_	15-21	Silt loam,		A-6	0	0	98-100 95-100 90-10	95-100	90-10
		silty clay	<u> </u>	· 	,	,			
		loam							
	21-34	Silt loam,	CL	A-6	0	0	98-100	95-100	90-10
_		silty clay		_				_	
_		loam		_	_		_	_	
_	34-44	Stratified silt CL-ML,	CL-ML, CL	A-4	0	0	98-100	95-100	85-10
_		loam to very					_	_	
_		fine sand		_				_	
_	44-60	Stratified silt	CL-ML, CL	A-4	0	0	98-100   95-100	95-100	85-10
_		loam to very			_		_		
		fine sand							
24A:									
Poskin	6-0	Silt loam	CL-ML, CL	A-4	0	0-7	95-100	90-100	80-10
_	9-12	Silt loam	CL-ML	A-4	0	0-7	95-100	90-100	80-10
_	12-19	Silt loam	CL	A-4, A-6	0	0-7	95-100   90-100   80-10	90-100	80-10
_	19-36	Silt loam	CL	A-4, A-6	0	0-7	95-100   90-100   80-10	90-100	80-10
_	36-39	Sandy loam,	SM, ML,	A-1, A-2, A-4	0	0-7	50-100   45-100   30-10	45-100	30-10
_		loam, gravelly	CL-ML, SC-SM	_			_	_	
		fine sandy			_			_	
		loam, very							
		gravelly sandy							
	0			,					L L
	39-60	stratilied sand	SP-SM, SP,	A-1, A-2, A-3	o _	/-0	45-100   40-95 	40-95 -	T5-65
		gravelly					_		
_		coarse sand						_	
.472									
Scott Lake	0-10	Sandy loam	SM, SC	A-2-4, A-4	0	0-7	80-100 75-100	75-100	50-80
	10-17	Sandy loam		A-2-4, A-4	0	0-7	75-100 75-100 50-80	75-100	50-80
	17-24	Sandy loam		A-2-4, A-4	0	0-7	75-100 75-100 50-80	75-100	50-80
	24-31	Gravelly loamy	SM, GM	A-1-a, A-2-4,	0	0-25	30-100 25-100		15-80
		sand, loamy							
_		sand, very					_	_	
_		gravelly loamy		_	_		_	_	
_		coarse sand			_			_	
_	31-80	Stratified sand	GP, GP-GM,	A-1, A-2, A-3	0	6-0	30-100 25-95	25-95	15-65
		to very	SP, SP-SM						
		gravelly							
		coarse sand					_		
_					_		_	_	

Table 23. -- Engineering Index Properties -- Continued

				Classification	cation		Fragm	Fragments	Per	Percentage pass	pass
Map symbol	Depth	USDA texture							Δ.	sieve number-	mber-
and		_					>10	3-10			
soil name			Unified	ied	AAS	AASHTO	inches	inches	4	10	40
	In	_					Pct	Pct		_	
28B:											
Haugen, very											
stony	0 - 4	Sandy loam	SM, SC-SM	SM	A-2-4, A-4	A-4	0 - 5	0-7	85-100 75-98	75-98	50-70
	4-15	Sandy loam,	SM, SC-SM	SM	A-1, A	A-1, A-2, A-4	0 - 5	0-7	55-100 50-90	20-90	35-85
		gravelly sandy							_	_	
		loam, fine									
		sandy loam,					_			_	
		gravelly loam					_			_	
	15-23	Gravelly sandy	SM, SC-SM	SM	A-1, A	A-1, A-2, A-4	0 - 5	0-7	55-100 50-90	20-90	35-75
		loam, sandy					_			_	
		loam, fine									
		sandy loam,									
		gravelly loam									
	23-35	Gravelly sandy	SM, SC-SM	SM	A-1, A	A-1, A-2, A-4	0 - 5	0-7	55-100 50-90	20-90	35-75
		loam, sandy					_			_	
		loam, gravelly					_			_	
		fine sandy					_			_	
		loam					_			_	
	35-49	Sandy loam,	SC, SM		A-2, A	A-2, A-4, A-1	0 - 5	0-7	55-100 50-90	20-90	35-75
		gravelly sandy					_			_	
		loam, fine									
		sandy loam					_			_	
	49-79	Gravelly sandy	SC, SC-SM	SM	A-1, A-2	-2	0 - 5	0-7	55-100 50-90	20-90	35-75
		loam, sandy									
		loam, fine					_			_	
		sandy loam					_			_	
	79-80	Gravelly sandy	sc, sc-	SM, SM	A-1, A	SC, SC-SM, SM A-1, A-2, A-4	0 - 5	0-7	55-100 50-90	20-90	35-75
		loam, sandy					_			_	
		loam, fine					_			_	
		sandy loam								_	
		_					_		_	_	

Table 23. -- Engineering Index Properties--Continued

	_	_	Class	Classification	Fragm	Fragments	Perce	Percentage pass	pass
Map symbol	Depth	USDA texture					sie	sieve number-	mber-
and	_				>10	3-10			
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	ם				Pct	Pct			
28B:									
Haugen	0-7	Sandy loam	SC-SM, SM	A-2-4, A-4	0-5	0-7	85-100 75-98	_	50-70
	7-15	Sandy loam,	SC-SM, SM	A-1, A-2, A-4	0-5	0-7	55-100 50-90	_	35-85
		gravelly sandy		_			_	_	
	_	loam, fine	_	_			_	_	
	_	sandy loam,	_	_			_	_	
	_	gravelly loam	_	_			_	_	
	15-23	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	0-5	0-7	55-100   50-90	_	35-75
	_	loam, sandy			_		_	_	
	_	loam, fine		_			_	_	
	_	sandy loam,		_			_	_	
	_	gravelly loam	_	_			_	_	
	23-35	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	0-5	0-7	55-100 50-90	_	35-75
		loam, sandy							
		loam, gravelly					_		
		fine sandy		. —					
		loam		. —			_	_	
	35-49	Sandy loam,	SM, SC	A-2, A-4, A-1	0-5	0-7	55-100   50-90	_	35-75
		gravelly sandy					_		
		loam, fine					_		
	_	sandy loam			_		_	_	
	49-79	Gravelly sandy	SC-SM, SC	A-1, A-2	0-5	0-7	55-100   50-90	_	35-75
	_	loam, sandy	_	_			_	_	
		loam, fine					_		
		sandy loam		_			_	_	
	79-80	Gravelly sandy	SC-SM, SM,	SC A-1, A-2, A-4	0-5	0-7	55-100   50-90	_	35-75
	_	loam, sandy		_			_	_	
	_	loam, fine	_	_			_	_	
	_	sandy loam					_	_	
	_	_		_	_		_	_	

Table 23. -- Engineering Index Properties -- Continued

Map symbol   Depth   USDA texture   Classification   Frequents   Presented pass   Pa											
Dill   Dill		Denth		Classifi	catio	d	Frag	ments	Per R	centage	pass
Dolt, vary   Double	and	1 1 1					>10	3-10	1		
In   Standy loam   SM	soil name			Unified	AA	SHTO	inches		_	10	40
10-14   Sandy loam   SM   A-1, A-2, A-4   1-5   0-3   55-100   75-100     10-14   Sandy loam   SC-SM, SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-14   Sandy loam   SC-SM, SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-14   Sandy loam   SC-SM, SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-14   Sandy loam   SC-SM, SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-15   Sandy loam   SC-SM, SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-16   Sandy loam   SM   SC-SM   A-1, A-2, A-3   0   0-25   30-100   25-100     10-16   Sandy loam   SM   SC-SM   A-1, A-2, A-3   0   0-25   30-100   25-100     10-16   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-16   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-16   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-16   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-16   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-17   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-18   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-18   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-18   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-18   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-18   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-18   Sandy loam   SM   SC-SM   A-1, A-2, A-3   0   0-25   30-100   25-100     10-18   Sandy loam   SM   SC-SM   A-1, A-2, A-3   0   0-25   30-100   25-100     10-18   Sandy loam   SM   SC-SM   A-1, A-2, A-3   0   0-25   30-100   25-100     10-18   Sandy loam   SM   SC-SM   A-1, A-2, A-3   0   0-25   30-100   25-100     10-18   Sandy loam   SM   SC-SM   A-1, A-2, A-3   0   0-25   30-100   25-100     10-18   Sandy loam   SM   SC-SM   A-1, A-2, A-3   0   0-25   30-100   25-100     10-18   Sandy loam   SM   SC-SM   A-1, A-2, A-3		년 					Pct	Pct			
10-14   Sandy loam   SM	+										
4-10   Sandy loam,   SC-SM, SK   A-1, A-2, A-4   0   0-3   55-100   50-100		0 - 4		SM	A-2,	A-4	1-5	0-3	80-100	75-100	50-75
10-14   Sandy loam, gravelly   S0-100   S		4-10			A-1,			0-3	55-100	50-100	35-75
10-14   Sandy loam, fire sandy   10-2, A-4   0   0-3   55-100   50-100   10-20   10-											
10-14   Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3   55-100   50-100     14-28   Sandy loam, gravelly   10-am gravel			loamy sand								
11-28   Sandy   10amy gravelly   10amy gravely   10amy gravely   10amy gravely   10amy gravely   10amy gravely   10amy gravely   10amy grave		10-14	Sandy loam,					0-3	55-100	50-100	35-75
14-28   Sandy loam,   SC, SM   A-1, A-2, A-4   0   0-3   55-100   50-100     16-28   Sandy loam,   SC, SM   A-1, A-2, A-3   0   0-25   30-100   50-100     28-34   Gravelly loamy   GM, SP-SM,   A-1, A-2, A-3   0   0-25   30-100   25-100     34-60   Stratified sand   GP, SP, GP-GM   A-1, A-2, A-3   0   0-25   30-100   25-95     10-28   Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-14   Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     114-28   Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     14-28   Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     15-28   Gravelly   Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     15-28   Gravelly   Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     15-28   Gravelly   SP-SM, GM,   A-1, A-2, A-3   0   0-25   30-100   25-100     15-28   Gravelly   GP-GM, SM   A-1, A-2, A-3   0   0-25   30-100   25-100     15-28   Gravelly   GP-GM, SM   A-1, A-2, A-3   0   0-25   30-100   25-100     15-28   Gravelly   GP-GM, SM   A-1, A-2, A-3   0   0-25   30-100   25-100     15-28   Gravelly   GP-SP-SM   GP, SP-SM   A-1, A-2, A-3   0   0-25   30-100   25-100     15-28   Gravelly   GP-GM, SM   GP, SP-SM			01								
14-28   Sandy loam,   14-28   Sandy loam,   14-28   Sandy loam,   14-28   Sandy loam,   14-28   Sandy loam,   1-24   Sandy loam,   1-											
100mm, gravelly   28-34   Gravelly   28-34   Gravelly loamy   5M, SP-SM,   A-1, A-2, A-3   0   0-25   30-100   25-100   25-100   Gravelly loamy   5M, GP-GM   GP-GM		14-28	Sandy loam,					0-3	55-100	50-100	
100mm, gravelly   100mm   28-34   Gravelly   28-34   Gravelly loamy   GW, SP-SM,   A-1, A-2, A-3   0   0-25   30-100   25-100   31-6			fine sandy								
28-34   Gravelly loamy   GM, SP-SM,   A-1, A-2, A-3   0   0-25   30-100   25-100   25-100   Gravelly very   SM, GP-GM   Gravelly   Gm, GP-GM   Gravelly   Gm, GP-GM   Gm   Gm   Gm   Gm   Gm   Gm   Gm							_	_	_		
Se.34   Gravelly loamy   SM, GP-GM   A-1, A-2, A-3   0   0-25   30-100   25-100   25-100   34-60   Stratified sand   GP, SP,   A-1, A-2, A-3   0   0-25   30-100   25-95   34-60   Stratified sand   GP, SP,   A-1, A-2, A-4   0   0-25   30-100   25-95   40   40   40   40   40   40   40   4			loam				_	_	_	_	
Sandy very   SM, GP-GM   Sand   Sandy   SP, GP-GM   Sandy   SP, GP-GM   Statified sand   GP, SP, GP-GM   A-1, A-2, A-3   0   0-25   30-100   25-95		28-34	Gravelly loamy	01			_	0-25	30-100	25-100	20-80
Gravelly sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-25   30-100   25-95			sand, very								
Sand   Sand   Sp. Sp.   A-1, A-2, A-3   0   0-25   30-100   25-95			gravelly								
34-60   Stratified sand GP, SP,   A-1, A-2, A-3   0   0-25   30-100   25-95			D D								
10-14   Sandy loam   SM, SC-SM   A-1, A-2, A-4   0   0-3   S0-100   75-100     10-14   Sandy loam, Sm, SC-SM   A-1, A-2, A-4   0   0-3   S0-100   75-100     10-14   Sandy loam, Sm, SC-SM   A-1, A-2, A-4   0   0-3   S5-100   S0-100     14-28   Sandy loam, Sm, SC-SM   A-1, A-2, A-4   0   0-3   S5-100   S0-100     14-28   Sandy loam, Sm, SC-SM   A-1, A-2, A-4   0   0-3   S5-100   S0-100     14-28   Sandy loam, Sm, SC-SM   A-1, A-2, A-4   0   0-3   S5-100   S0-100     14-28   Sandy loam, Sm, SC-SM, GM, A-1, A-2, A-3   0   0-25   S0-100   S0-100     14-28   Sandy loam, Sm, SC-SM, GM, A-1, A-2, A-3   0   0-25   S0-100   S0-100     14-28   Sandy loam, Sm, SC-SM, GM, B-1, A-2, A-3   0   0-25   S0-100   S0-100     14-28   Sandy loam, Sm, SC-SM, GM, B-1, A-2, A-3   0   0-25   S0-100   S0-100     14-28   Sandy loam, Sm, SC-SM, GM, SM   A-1, A-2, A-3   0   0-25   S0-100   S0-100     14-28   Sandy loam, Sm, SC-SM, GM, SM   A-1, A-2, A-3   0   0-25   S0-100   S0-100     14-28   Sandy loam, Sm, SC-SM, GM, SM   A-1, A-2, A-3   0   0-25   S0-100   S0-100     14-28   Sandy loam, Sm, SC-SM, GM, SM   A-1, A-2, A-3   0   0-25   S0-100   S0-100     14-28   Sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   S0-100   S0-100     14-28   Sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   S0-100   S0-100     14-28   Sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   S0-100   S0-100     14-28   Sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   S0-100   S0-100     14-28   Sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   S0-100   S0-100     14-28   Sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   S0-100     14-28   Sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   S0-100     14-28   Sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   S0-100     14-28   Sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   S0-100     14-28   Sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   S0-100     14-28   Sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   S0-100     14-28   Sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   S0-100     14		34-60						0-25	30-100	25-95	15-65
Gravelly   Coarse sand   SM   A-2, A-4   0   0-3   80-100   75-100     8-10   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-14   Sandy loam, gravelly   SM, SC - SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10-14   Sandy loam, gravelly   SM, SC   A-1, A-2, A-4   0   0-3   55-100   50-100     14-28   Sandy loam, gravelly   SM, SC   A-1, A-2, A-4   0   0-3   55-100   50-100     14-28   Sandy loam, gravelly   SM, SC   A-1, A-2, A-4   0   0-3   55-100   50-100     14-28   Sandy loam, gravelly   SM, SC   A-1, A-2, A-3   0   0-25   30-100   25-100     15-28-34   Gravelly   GP-GM, SM   GP-GM, SM   ST   SA-1, A-2, A-3   0   0-25   30-100   25-100     15-28-34   Gravelly   SP-SM   GP-SM   A-1, A-2, A-3   0   0-25   30-100   25-100     15-28-34   Gravelly   GP-SM   GP-S				-SM,							
			gravelly				_			_	
10-14   Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   S5-100   75-100     10-14   Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   S5-100   S0-100     10-14   Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   S5-100   S0-100     10-14   Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   S5-100   S0-100     10-28   Sandy loam,   SM, SC   A-1, A-2, A-4   0   0-3   S5-100   S0-100     14-28   Sandy loam,   SM, SC   A-1, A-2, A-3   0   0-3   S5-100   S0-100     15-28   Sandy loam,   SP-SM, GM,   A-1, A-2, A-3   0   0-25   30-100   S5-100     15-28   Sandy loam,   SP-SM, GM,   A-1, A-2, A-3   0   0-25   30-100   S5-100     15-28   Sandy loam,   SP-SM, GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   Sandy loam,   SP-SM, GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   Sandy loam,   SP-SM, GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   Sandy loam,   SP-SM, GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   Sandy loam,   SP-SM, GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   Sandy loam,   SP-SM, GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-25   S0-100   S5-100     15-28   SANDY GM,   A-1, A-2, A-3   0   0-2			coarse sand								
8-10   Sandy loam, fine sandy   Loam, gravelly   Loam, gravely   Loam, gravely   Loam, gravely   Loam, gravely   Loam, gravel	Rosholt	0-8	Sandy loam	SM	A-2,	A - 4	0	0-3	80-100	75-100	50-75
fine sandy loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam Gravelly loamy SP-SM, GM, A-1, A-2, A-3 Gravelly sand, very gravelly sand Stratified sand SP, GP-GM, A-1, A-2, A-3 Gravelly sand Stratified sand SP-SM, GM, A-1, A-2, A-3 STRATIFIED SP-SM, GM, SM Gravelly sand Stratified sand SP-SP-SM Gravelly sand Stratified sand SP-SP-SM GRA-1, A-2, A-3 SP-SM SP-SM GRA-1, A-2, A-3 SP-SM SP-SM SP-SM GRA-1, A-2, A-3 SP-SM SP		8-10	Sandy loam,		A-1,			0-3	55-100	50-100	35-75
loamy gravelly   loamy sand   Sandy loam, gravelly   loamy sand   Sandy loam, gravelly   loamy gravelly   loamy gravelly   loam, gravelly   Sh. SC   A-1, A-2, A-4   0   0-3   55-100   50-100   loam, gravelly   Sh. SC   A-1, A-2, A-4   0   0-3   55-100   50-100   loam, gravelly   Sh. SM, GM, A-1, A-2, A-3   0   0-25   30-100   25-100   gravelly   sand   Sh. GP-GM, SM   Sh. SP-SM   GP-GM, A-1, A-2, A-3   0   0-25   30-100   25-100   coarse sand, sand   Sh. GP-GM, A-1, A-2, A-3   0   0-25   30-100   25-100   gravelly   GP-SP-SM   GP-SP-SM   GP-GM, GP		· ·						,			
Joamy sand   Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     Line sandy   SM, SC   A-1, A-2, A-4   0   0-3   55-100   50-100     Loamy sand   SM, SC   A-1, A-2, A-4   0   0-3   55-100   50-100     Loam, gravelly   SP-SM, GM,   A-1, A-2, A-3   0   0-25   30-100   25-100     sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand,   SP, GP-GM,   A-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand,   GP, SP-SM			loam, gravelly				_			_	
Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     Loamy gravelly			loamy sand								
Loam, gravelly   SM, SC   A-1, A-2, A-4   0   0-3   55-100   50-100     Sandy loam, gravelly   SM, SC   A-1, A-2, A-4   0   0-3   55-100   50-100     Loam, gravelly   GP-GM, SM   A-1, A-2, A-3   0   0-25   30-100   25-100     sand, very   GP-GM, SM   SA-1, A-2, A-3   0   0-25   30-100   25-100     sand   Statified sand   SP, GP-GM, A-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM   GA-1, A-2, A-3   0   0-25   30-100   25-100		10-14	Sandy loam,					0-3	55-100	20-100	35-75
Loam, gravelly   SM, SC   A-1, A-2, A-4   0   0-3   55-100   50-100     fine sandy   Loam, gravelly   A-1, A-2, A-3   0   0-25   30-100   25-100     sand, very   GP-GM, SM   A-1, A-2, A-3   0   0-25   30-100   25-100     sand   Statified sand   SP, GP-GM, A-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand, very   GP-GM, A-1, A-2, A-3   0   0-25   30-100   25-100     coarse sand   GP, SP-SM			OĮ.								
Sandy loam,         SM, SC         A-1, A-2, A-4         0         0-3         55-100         50-100           fine sandy         loam, gravelly         A-1, A-2, A-3         0         0-25         30-100         25-100           sand, very         GP-GM, SM         A-1, A-2, A-3         0         0-25         30-100         25-100           sand, very         GP-GM, SM         A-1, A-2, A-3         0         0-25         30-100         25-100           sand         Stratified sand, SP, GP-GM, A-1, A-2, A-3         0         0-25         30-100         25-100           to very         GP, SP-SM         A-1, A-2, A-3         0         0-25         30-100         25-100											
fine sandy		14-28	Sandy loam,					0-3	55-100	50-100	35-80
loam, gravelly			fine sandy				_				
Loam   Gravelly loamy   SP-SM, GM,   A-1, A-2, A-3   0   0-25     sand, very   GP-GM, SM							_	_		_	
Gravelly loamy         SP-SM, GM,         A-1, A-2, A-3         0 0-25           sand, very         GP-GM, SM         A-1, A-2, A-3         0 0-25           gravelly         SP-SM         A-1, A-2, A-3         0 0-25           to very         GP, SP-SM         A-1, A-2, A-3         0 0-25           gravelly         Goarse sand         GP, SP-SM         A-1, A-2, A-3         0 0-25			loam								
sand, very     GP-GM, SM       gravelly     GP-GM, A-1, A-2, A-3       coarse sand     GP, SP-GM, A-1, A-2, A-3       gravelly     GP, SP-SM       coarse sand     GP, GP-GM, A-1, A-2, A-3		28-34	Gravelly loamy	SP-SM, GM,	A-1,			0-25	30-100	25-100	20-80
Coarse sand,   Sp. GP-GM,   A-1, A-2, A-3   0   0-25   30-100   25-100			sand, very	GP-GM, SM							
sand       Stratified sand   SP, GP-GM,       A-1, A-2, A-3   0   0-25   30-100   25-100           to very       GP, SP-SM   G			graverry								
Stratified sand   SP, GP-GM,   A-1, A-2, A-3   0   0-25   30-100   25-100   to very   GP, SP-SM   gravelly   coarse sand											
GP,		34-60						0-25	30-100	25-100	15-65
gravelly coarse sand			to very				_	_	_	_	
			gravelly								

Table 23. -- Engineering Index Properties--Continued

			Classif	Classification	Frag	Fragments	Perc	Percentage pass	pass
Map symbol	Depth	USDA texture					si	sieve number-	mber-
and		. —		_	>10	3-10			
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	п				Pct	Pct			
28C:									
Haugen, very		_				_	_	_	
stony	0 - 4	Sandy loam	SM, SC-SM	A-2-4, A-4	0 - 5	0-7	85-100 75-98	2-98	50-70
	4-15	Sandy loam,	SM, SC-SM	A-1, A-2, A-4		0-7	55-100 50-90	06-0	35-85
		gravelly sandy		_	_	_	_	_	
		loam, fine		_	_	_	_	_	
		sandy loam,		_	_	_	_	_	
		gravelly loam		_	_	_	_	_	
	15-23	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	-4 0-5	0-7	55-100 50-90	06-0	35-75
_		loam, sandy		_	_	_	_		
_		loam, fine		_	_	_	_		
_		sandy loam,			_				
		gravelly loam					_		
	23-35	Gravelly sandy	SM, SC-SM	A-1, A-2, A-4	-4 0-5	0-7	55-100 50-90	06-0	35-75
		loam, sandy		_	_		_	_	
_		loam, gravelly		_	_	_	_	_	
_		fine sandy		_	_	_	_		
_		loam		_	_	_	_		
	35-49	Sandy loam,	SC, SM	A-2, A-4, A-1	-1 0-5	0-7	55-100 50-90	06-0	35-75
_		gravelly sandy		_	_	_	_	_	
		loam, fine		_	_	_	_	_	
_		sandy loam		_	_	_	_		
	49-79		SC, SC-SM	A-1, A-2	0 - 5	0-7	55-100 50-90	06-0	35-75
_		loam, sandy			_		_		
_		loam, fine			_	_	_		
_		sandy loam		_	_	_	_		
_	79-80	Gravelly sandy	SC, SC-SM, SM A-1, A-2, A-4	[A-1, A-2, A	-4 0-5	0-7	55-100 50-90	06-0	35-75
		loam, sandy		_	_	_	_	_	
		loam, fine			_				
_		sandy loam			_		_		
				- —	- —			_	

Table 23. -- Engineering Index Properties -- Continued

			Classi	Classification	no	Frag	Fragments	Per	Percentage pass	pass
Map symbol	Depth	USDA texture						Ø	sieve number-	mber-
and				_		>10	3-10			
soil name		_	Unified	_	AASHTO	inches	inches   inches	4	10	40
	ų.					Pot	Pct			
28C:										
Haugen	0-7	Sandy loam	SC-SM, SM	A-2-	A-2-4, A-4	0-2	0-7	85-100 75-98	75-98	50-70
	7-15	Sandy loam,	SM, SC-SM	A-1,	A-1, A-2, A-4	0 - 5	0-7	55-100 50-90	20-90	35-85
		gravelly sandy		_				_	_	
		loam, fine	_	_		_	_			
		sandy loam,	_	_		_	_			
		gravelly loam		_				_	_	
_	15-23	Gravelly sandy	SC-SM, SM	A-1,	A-1, A-2, A-4	0-5	0-7	55-100 50-90	20-90	35-75
_		loam, sandy		_			_	_		
		loam, fine		_		_	_	_	_	
		sandy loam,	_	_		_	_			
_		gravelly loam	_	_		_	_	_		
	23-35	Gravelly sandy	SC-SM, SM	A-1,	A-1, A-2, A-4	0-5	0-7	55-100 50-90	20-90	35-75
		loam, sandy		_			_	_		
_		loam, gravelly		_		_			_	
_		fine sandy	_	_		_	_	_		
_		loam	_	_		_	_	_		
	35-49	Sandy loam,	SM, SC	A-2,	A-2, A-4, A-1	0-2	0-7	55-100 50-90	20-90	35-75
		gravelly sandy		_			_	_		
		loam, fine		_		_	_	_	_	
		sandy loam		_		_	_	_	_	
_	49-79	Gravelly sandy	SC, SC-SM	A-1,	A-2	0-5	0-7	55-100 50-90	20-90	35-75
		loam, sandy		_		_	_	_	_	
		loam, fine		_		_	_	_	_	
		sandy loam		_			_	_		
	79-80	Gravelly sandy	SC, SC-SM, 8	3M   A-1,	SM A-1, A-2, A-4	0-2	0-7	55-100 50-90	20-90	35-75
		loam, sandy		_			_	_		
		loam, fine		_		_	_	_	_	
_		sandy loam		_		_			_	
_		_	_	_		_	_	_	_	

Table 23. -- Engineering Index Properties--Continued

			•	)	•				
	:		Classi	Classification	Fre	Fragments	Per	Percentage	pass
Map symbol	Depth	USDA texture 			>10	3-10	. —	sieve number-	mber-
soil name			Unified	AASHTO	inche	inches inches	4	10	40
	ų				Pct	- Pct			
28C:		. — –	. — –						
	0 - 4	Sandy loam	SM	A-2, A-4	1-5	0-3	80-100 75-100	75-100	50-75
	4-10	Sandy loam,	SC-SM, SM	A-2,	A-4 0	0-3	55-100 50-100	50-100	35-75
		loam, gravelly	- <u>-</u> -						
	•	loamy sand							1
	10-14	Sandy Loam,	SC-SM, SM	A-1, A-2, A	A-4 0	0 - 3	55-100   50-100		35-75
		loam, gravelly	[Å]		- —	- —	_		
		loamy sand							
	14-28	Sandy Loam,	SM, SC	A-1, A-2, A	A-4 0	0-3	25-100	25-100   50-100	35-80
		loam, gravelly							
			_	_	_	_	_	_	
_	28-34	Gravelly loamy	GM, S	A-1, A-2, A	A-3 0	0-25	30-100 25-100		20-80
		sand, very	SM, GP-GM						
		gravelly							
_		משומי בשוותי							
	34-60	Stratified sand	nd SP, GP-GM,	A-1, A-2, A	A-3 0	0-25	30-100 25-95		15-65
			GP,		_	- —	_		
_		gravelly	_	_	_	_	_	_	
		coarse sand							
Rosholt	8-0	Sandy loam	SM	A-2, A-4	0	0-3	80-100	75-100	50-75
	8-10	Sandy loam,	SM, SC-SM		A-4 0	0-3	55-100 50-100 35-75	50-100	35-75
		fine sandy		î I		) - —			)
_		loam, gravelly	- Ly	_	_	_	_	_	
		loamy sand							
	10-14	Sandy loam,	SM, SC-SM	A-1, A-2, A	A-4 0	0-3	55-100 50-100		35-75
		line sandy loam, gravelly							
							_	_	
_	14-28	Sandy loam,	SM, SC	A-1, A-2, A	A-4 0	0-3	55-100 50-100		35-80
					_				
		loam, gravelly	[ <sub>Y</sub>		_		_	_	
		loam		ŕ		C	7	- C	0
	# C - O 7	gand wery	SM SP-SM	A-1, A-2, A-		0	09-07 001-67 001-06	- C7	20-00
		gravelly						_	
_		coarse sand,					- —		
_		sand	_	_	_	_	_		
_	34-60	ed		A-1, A-2, A-3	-3 0	0-25	30-100 25-100		15-65
		to very	SP, SP-SM						
		gravelly coarse sand							
_									
-		_	=	_	-	=	-		

Table 23. -- Engineering Index Properties -- Continued

Map symbol	Depth	USDA texture	Clas	Classification	Fragments	ents	Pel	Percentage pass sieve number-	pass
and	· - —				>10	3-10			
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	uI				Pct	Pct			
33B:									
Chetek	0-10	Sandy loam	SM, SC-SM	A-2-4, A-4	0-5	0-15	80-100	80-100   75-100   50-75	50-75
	10-16	Sandy loam,	SC, SM	A-1, A-2, A-4		0-15	55-100	55-100   50-100   35-75	35-75
		gravelly sandy		_	_		_		
		loam		_	_				
	16-20	Loamy sand,	SM, SP-SM	A-1, A-2-4,	0-5	0-15	30-95	25-95	15-75
		gravelly loamy		A-3	_				
		sand, gravelly		_	_		_		
	_	sand, very		_	_		_		
	_	gravelly		_	_		_		
		coarse sand			_				
	20-60	Stratified very SP,	SP, SP-SM	A-1-b	0 - 5	0-15	30-95	25-95	15-60
	_	gravelly		_	_		_		
		coarse sand to		_	_				
	_	sand		_	_		_		
33C:									
Chetek	0-10	Sandy loam	SM, SC-SM	A-2-4, A-4	0 - 5	0-15	80-100	80-100 75-100 50-75	50-75
	10-16	Sandy loam,	SM, SC	A-1, A-2, A-4	_	0-15	55-100	55-100   50-100   35-75	35-75
		gravelly sandy			_				
		loam		_	_				
	16-20	Loamy sand,	SM, SP-SM	A-1, A-2-4,	0 - 5	0-15	30-95	25-95	15-75
	_	gravelly loamy		A-3	_		_		
		sand, gravelly		_	_		_		
	_	sand, very		_	_		_		
		gravelly		_	_				
		coarse sand			_				
	20-60	Stratified very SP-SM,	SP-SM, SP	A-1-b	0-5	0-15	30-95	25-95	15-60
		gravelly			_		_	_	
		coarse sand to					_		
		sand		_	_				
	_	_		_	_		_		

Table 23. -- Engineering Index Properties -- Continued

	:		Classification	ication		Fragments	nents	Per	Percentage	pass
Map symbol	Depth	USDA texture				>10	3-10	<b>ω</b>	sieve number-	mber-
soil name			Unified	AASHTO	ဥ	inches	inches inches	4	10	40
	H					Pot	Pct			
38A: Rosholt	8-0	Sandv loam	SMS	A-2. A-4	_	0	0 - 3	80-100	75-100	50-75
	8-10	Sandy loam,	SC-SM, SM	A-1, A-2,	2, A-4	0	0-3	55-100   50-100   35-75	50-100	35-75
		fine sandy								
	10-14		SC-SM, SM	A-1, A-2,	, A-4	0	0-3	55-100 50-100	50-100	35-75
		fine sandy						_		
								_		
		loamy sand				_		_	_	
	14-28	Sandy loam,	SC, SM	A-1, A-2,	, A-4	0	0-3	55-100	55-100 50-100	35-80
		loam grayelly								
	28-34	Gravelly loamy	GM, SP-SM,	A-1, A-2,	2, A-3	0	0-25	30-100 25-100	25-100	20-80
_		sand, very	SM, GP-GM			_		_	_	
		gravelly				_		_	_	
		coarse sand,								
			į				i.		i i	1
	34-60	Stratified sand	GP, S	A-1, A-2,	2, A-3	0	0-25	30-100	25-100	15-65
		to very	SP, GP-GM							
		gravelly								
		coarse sand								
38B:										
Rosholt	8-0	Sandy loam	SM	A-2, A-4		0	0-3	80-100 75-100	75-100	50-75
	8-10		SC-SM, SM	A-1, A-2,	, A-4	0	0-3	55-100	55-100   50-100	35-75
		Ine sandy   losm gravelly								
	10-14	_	SM. SC-SM	A-1. A-2.	A-4	c	0-3	55-100 50-100	50-100	35-75
		fine sandy			! !		)			
		loam, gravelly						_		
		loamy sand				_		_	_	
	14-28		SC, SM	A-1, A-2,	, A-4	0	0-3	55-100 50-100	20-100	35-80
		loam, gravelly								
	0	loam	200	· ·			Ċ		- C	0
	1 0 1	sand very	GM. GP-GM	7-6 /1-6 -	4	>	9			0
		gravelly								
		coarse sand,								
. —		sand								
	34-60	fied	sand SP-SM, GP-GM,	GP-GM, A-1, A-2, A-3	, A-3	0	0-25	30-100 25-100	25-100	15-65
_		to very	GP, SP			_		_	_	
		gravelly								
		coarse sand								
									_	

Table 23. -- Engineering Index Properties -- Continued

10-14   Sandy loam   SM, SC-SM   A-1, A-2, A-4   0   0-3   S5-100   S5-10	Map symbol	Depth	USDA texture	Classification	cation		Fragn	Fragments	Per s	Percentage pass sieve number-	pass mber-
Dolt  0.8   Sandy loam  SW   N-2, A-4   0   0-3   SF-100	and	4					>10	3-10			
In   In	soil name			Unified	AASH	TO	inches	inches	4	10	40
10-14   Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-1		u.					Pct	Pct			
8-10   Sandy loam,   SC-SM, SK   A-1, A-2, A-4   0   0-3   55-100   50-100   10-muy sand   10-muy	38C: Rosholt	8-0		W.S.		4	0	0 - 3	80-100	75-100	50-75
10-14   fine sandy   10am, gravelly		8-10	Sandy loam,			Ą	0	0-3	55-100	50-100	35-75
10-14   Sandy loam,   SC-SM, SW   A-1, A-2, A-4   0   0-3   SS-100   SO-100											
10-14   Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3   55-100   50-100											
fine sandy   fine sandy		10-14	П					0-3	55-100	50-100	35-75
Loamy gravelly    14-28   Sandy loam,   SC, SM   A-1, A-2, A-4   0   0-3   55-100   50-100     16-28   Sandy loam,   SC, SM   A-1, A-2, A-3   0   0-25   30-100   50-100     10 oam, gravelly   GP-SM, GM,   A-1, A-2, A-3   0   0-25   30-100   25-100     28-34   Gravelly loamy   SP-SM, GM,   A-1, A-2, A-3   0   0-25   30-100   25-100     10 coarse sand   Smady loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10 coarse sand   Smady loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     10 coarse sand   Smady loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     11 coam, gravelly   Sm, SC-SM   Sm, A-1, A-2, A-4   0   0-3   55-100   50-100     12 coarse sand,   Sm, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     14 coam, gravelly   Sm, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     15 coarse sand,   Sm, SC-SM   A-1, A-2, A-3   0   0-25   30-100   50-100     15 coarse sand,   Sm, SC-SM   Sm, A-1, A-2, A-3   0   0-25   30-100   50-100     15 coarse sand,   Sm, SC-SM   Sm, A-1, A-2, A-3   0   0-25   30-100   50-100     16 coarse sand,   Sm, SC-SM   A-1, A-2, A-3   0   0-25   30-100   50-100     17 coarse sand,   Sm, SC-SM   A-1, A-2, A-3   0   0-25   30-100   50-100     18 coarse sand,   Sm, SC-SM   A-1, A-2, A-3   0   0-25   30-100   50-100     17 coarse sand,   Sm, SC-SM   A-1, A-2, A-3   0   0-25   30-100   50-100     18 coarse sand,   Sm, SC-SM   A-1, A-2, A-3   0   0-25   30-100   50-100     18 coarse sand,   Sm, SC-SM   A-1, A-2, A-3   0   0-25   30-100   50-100     18 coarse sand,   Sm, SC-SM   A-1, A-2, A-3   0   0-25   30-100   50-100     18 coarse sand,   Sm, SC-SM   A-1, A-2, A-3   0   0-25   30-100   50-100     18 coarse sand,   Sm, SC-SM   A-1, A-2, A-3   0   0-25   30-100   50-100     18 coarse sand,   Sm, SC-SM   A-1, A-2, A-3   0   0-25   30-100   50-100     18 coarse sand,   Sm, SC-SM   A-1, A-2, A-3   0   0-25   30-100   50-100     18 coarse sand,   Sm, SC-SM   A-1, A-2, A-3   0   0-25   30-100   50-100     18 coarse sand,   Sm, SC-SM   A-1, A-2, A										_	
14-28   Sandy loam,   5C, SM   A-1, A-2, A-4   0   0-3   55-100   50-100											
14-28   Sandy loam,   SC, SM   A-1, A-2, A-4   0   0-3   55-100   50-100			loamy sand					,			
10mm, gravelly   10mm		T4-28	Sandy Loam,			Ą	>	5-0	00T-99	00T-05	35-80
28.34   Gravelly Loamy   SP-SM, GM,   A-1, A-2, A-3   0   0-25   30-100   25-100											
28-34   Gravelly loamy   SP-SM, GM,   A-1, A-2, A-3   0   0-25   30-100   25-100   31-60   3											
Sand, very   GP-GM, SM   GP-GM, SM   GP-GM, SM   Gravelly   Grav		28-34	Gravelly loamy			A-	0	0-25	30-100	25-100	20-80
Goarse sand   Goarse sand   SP, SP-SM   A-1, A-2, A-3   0   0-25   30-100   25-100									_	_	
Sand   Sand   Sand   Sand   Sand   Sand   Sand   Sand   Sand   Sand   Sand   Sand   Sand   Sand   Sand   Sand   Sand   Sand   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-25   30-100   25-100   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   S5-100   50-100   Sandy loam   SM   SC-SM   A-1, A-2, A-4   0   0-3   S5-100   50-100   Sandy loam   SM   SC-SM   SA-1, A-2, A-4   0   0-3   S5-100   S0-100   Sandy loam   SM   SC-SM   SA-1, A-2, A-4   0   0-3   S5-100   S0-100			gravelly								
34-60   Stratified sand   QP, GP-GMt,   A-1, A-2, A-3   0   0-25   30-100   25-100   1-0 very   Gravelly   Gravely   Gravelly   Gravelly   Gravelly   Gravely   Gravely   Gravely   Gravely   Gravely   Gravely			Ø								
10   10   10   10   10   10   10   10								,			
Coarse sand   SP, SP-SM   Coarse sand   S5-100   S5-10		34-60		O				0-25	30-100	25-100	15-65
Coarse sand   Coarse sand			to very								
holt			gravelly								
holt			coarse sand								
Note   Sandy loam   SM, SC-SM   A-2, A-4   0   0-3   SF-100   75-100	38D:										
Sandy loam,   SM, SC-SM   A-1, A-2, A-4   0   0-3   55-100   50-100     Line sandy	Rosholt	8-0	Sandy loam	SM		4	0	0-3	80-100	75-100	50-75
fine sandy		8-10			A-1, A-		0	0-3	55-100	50-100	35-75
loam, gravelly   loam, gravelly   loamy sand   SC-SM, SM   A-1, A-2, A-4   0   0-3   55-100   50-100									_		
Loamy sand   SC-SM, SM   A-1, A-2, A-4   0   0-3   55-100   50-100     fine sandy   loam, gravelly											
Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3   55-100   50-100     Ioamy gravelly								,		-	
Loam, gravelly   SM, SC   A-1, A-2, A-4   0   0-3   55-100   50-100     Loam, gravelly   SM, SP-SM,   A-1, A-2, A-3   0   0-25   30-100   25-100     Cavelly Loamy   SM, GP-GM   A-1, A-2, A-3   0   0-25   30-100   25-100     Sand, very   SM, GP-GM   SP-SM, A-1, A-2, A-3   0   0-25   30-100   25-100     Cartelified sand   GP-GM, SP-SM, A-1, A-2, A-3   0   0-25   30-100   25-100     Coarse sand   GP-GM, SP-SM, A-1, A-2, A-3   0   0-25   30-100   25-100     Cartelified sand   GP-GM, SP-SM, A-1, A-2, A-3   0   0-25   30-100   25-100     Cartelified sand   GP-GM, SP-SM, A-1, A-2, A-3   0   0-25   30-100   25-100     Cartelified sand   GP, SP   CATTELIFIED		10-14	Sandy loam,					0-3	2-100	20-T00	35-75
Sandy loam,   SM, SC   A-1, A-2, A-4   0   0-3   55-100   50-100     fine sandy											
Sandy loam,   SM, SC   A-1, A-2, A-4   0   0-3   55-100   50-100     fine sandy											
fine sandy		14-28				Ą	0	0-3	55-100	50-100	35-80
loam, gravelly   loam   loam   gravelly			fine sandy						_	_	
Loam   Gravelly   GM, SP-SM,   A-1, A-2, A-3   0   0-25   30-100   25-100   sand, very   SM, GP-GM											
Gravelly   SM, GP-GM   Structure   SM, GP-GM   Structure   SM, GP-GM   Structure   SM, GP-GM   Structure   SM, GP-GM   SP-SM, A-1, A-2, A-3   0   0-25   30-100   25-100		6	loam			F	_	Ċ	7	- C	0
gravelly coarse sand, sand Stratified sand GP-GM, SP-SM, A-1, A-2, A-3 0 0-25 30-100 25-100 coarse sand coarse sand		# 0 0 7	sand verv	Ψ.		4	>	0 0			20-02
Coarse sand,			gravelly								
sand       Stratified sand   GP-GM, SP-SM,  A-1, A-2, A-3        0       0-25   30-100   25-100           to very       GP, SP         gravelly       coarse sand			coarse sand,								
Stratified sand   GP-GM, SP-SM,   A-1, A-2, A-3   0   0-25   30-100   25-100   to very   GP, SP											
GP,     and		34-60		GP-GM, SP-SM,				0-25	30-100	25-100	15-65
gravelly			to very						_	_	
coarse sand			gravelly						_	_	
			coarse sand							_	

Table 23. -- Engineering Index Properties -- Continued

			Classif	Classification	Fragi	Fragments	Perc	Percentage pass	pass
Map symbol	Depth	USDA texture					.s	sieve number-	mber-
and		_			>10	3-10			
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	In			_	Pct	Pct	_		
							_		
42D:									
Amery	0-3	Sandy loam	SM, SC-SM	A-2-4, A-4	0-5	0-7	85-100   75-98	2-98	50-75
	3-22	Sandy loam,	SC-SM, SM	A-2-4, A-4	0 - 5	0-7	55-100   50-90	06-0	50-75
		loam, gravelly					_		
		loam, gravelly					_		
		sandy loam							
	22-34	Sandy loam,	SC-SM, SM	A-1-b, A-2-4,	0 - 5	0-7	55-100 50-90	06-0	35-75
		fine sandy		A-4			_		
		loam, gravelly		_	_		_		
		sandy loam							
	34-41	Gravelly sandy	SM, SC-SM	A-1-b, A-2-4,	0 - 5	0-7	55-100 50-90	06-0	35-75
		loam, fine		A-4	_		_		
		sandy loam,					_	_	
		sandy loam						_	
	41-57	Gravelly sandy	SC, SM	A-2-4, A-4,	0-5	0-7	55-100   50-90	06-0	35-75
		loam, fine		A-1-b			_	_	
		sandy loam,					_	_	
		sandy loam					_	_	
	57-71	Sandy loam,	SC, SM	A-2-4, A-4,	0 - 5	0-7	55-100   50-90	06-0	35-75
		fine sandy		A-1-b			_		
		loam, gravelly		_	_		_		
		sandy loam					_		
	71-80	Sandy loam,	SM, SC-SM	A-1-b, A-2-4,	0 - 5	0-7	55-100   50-90	06-0	35-75
		fine sandy		A-4			_	_	
		loam, gravelly						_	
		sandy loam						_	
		_		_	_		_	_	

Table 23. -- Engineering Index Properties -- Continued

			Classif	Classification	-	Fragments	ents	Per	Percentage pass	pass
Map symbol	Depth	USDA texture						01	sieve number-	mber-
and		. —		_		>10	3-10			
soil name			Unified	AASHTO		inches inches	inches	4	10	40
	uI					Pct	Pct			
43B:										
Antigo	6-0	Silt loam	ML, CL-ML	A-4	_	0	0-7	90-100	90-100  85-100  70-10	70-10
	9-12	Silt loam	ML, CL-ML	A-4	_	0	0-7	90-100	90-100 85-100 70-10	70-10
	12-19	Silt loam	CL-ML, CL	A-4	_	0	0-7	90-100	90-100  85-100  70-10	70-10
	19-28	Silt loam	CI, CL-ML	A-4	_	0	0-7	001-06	90-100  85-100  70-10	70-10
	28-31	Loam, sandy	CI-MI, SM,	A-1, A-2, A-4	A-4	0	0-7	50-100	50-100   45-100   35-85	35-85
	_	loam, fine	ML, SC-SM	_	_	_	_	_	_	
		sandy loam,		_	_	_	_			
		gravelly loam,		_	_	_	_			
	_	gravelly sandy		_	_	_				
	_	loam, very		_	_	_	_	_	_	
		gravelly fine		_	_				_	
		sandy loam		_	_			_	_	
	31-33	Very gravelly	SC-SM, SM, ML A-1, A-2, A-4	A-1, A-2,	A-4	0	0-7	20-100	50-100   45-100   35-85	35-85
	_	sandy loam,		_	_	_	_	_	_	
	_	loam, fine		_	_	_	_	_	_	
	_	sandy loam,		_	_	_	_	_	_	
	_	gravelly loam,		_	_	_	_	_	_	
	_	gravelly sandy		_	_	_	_	_	_	
		loam, sandy		_	_	_	_			
		loam	_	_	_	_				
	33-60	Stratified sand GP-GM, GP,	GP-GM, GP,	A-1, A-2, A-3	A-3	0	0-7	45-100 40-95	40-95	15-65
		to very	SP-SM, SP	_	_	_	_			
	_	gravelly		_	_	_				
	_	coarse sand		_	_	_	_	_	_	
		_	_	_						

Table 23. -- Engineering Index Properties -- Continued

			Classification	ication	Fragi	Fragments	Per	Percentage pass	pass
Map symbol	Depth	USDA texture					<b>o</b> 2	sieve number-	mber-
and	_	_	_	_	>10	3-10			
soil name			Unified	AASHTO	inches	inches inches	41	10	40
	ui –				Pct	Pct			
43C:			_						
Antigo	6-0	Silt loam	CL-ML, ML	A-4	0	2-0	90-100	90-100  85-100  70-10	70-10
	9-12	Silt loam	ML, CL-ML	A-4	0	0-7	90-100	90-100   85-100   70-10	70-10
	12-19	Silt loam	CL, CL-ML	A-4	0	0-7	90-100	90-100 85-100 70-10	70-10
	19-28	Silt loam	CL-ML, CL	A-4	0	0-7	90-100	90-100  85-100  70-10	70-10
	28-31	Loam, sandy	SM, ML,	A-1, A-2, A-4	0	0-7	50-100	50-100   45-100   35-85	35-85
	_	loam, fine	SC-SM, CL-ML		_		_		
	_	sandy loam,			_				
	_	gravelly loam,	_		_				
	_	gravelly sandy	_	_	_	_	_		
	_	loam, very	_		_		_		
	_	gravelly fine	_		_		_		
	_	sandy loam	_		_		_		
	31-33	Very gravelly	SM, ML, SC-SM A-1, A-2, A-4	A-1, A-2, A-	0	0-7	50-100	50-100   45-100   35-85	35-85
	_	sandy loam,	_	_	_		_		
	_	loam, fine	_		_		_		
		sandy loam,	_		_	_	_	_	
_	_	gravelly loam,			_		_	_	
	_	gravelly sandy	_		_		_		
	_	loam, sandy			_				
	_	loam	_		_				
	33-60	Stratified sand SP-SM, SP,	SP-SM, SP,	A-1, A-2, A-3	0 =	0-7	45-100 40-95	40-95	15-65
	_	to very	GP-GM, GP		_				
	_	gravelly	_	_	_		_		
_	_	coarse sand			_		_	_	
	_		_		_		_		

Table 23. -- Engineering Index Properties -- Continued

The color of the	Lodmys neW	1 4 4	4 40211	Classi	Classification		Fragments	Per	Percentage pass	pass
10   10   10   10   10   10   10   10		4				-	-			
In   Pet	soil name			Unified	AASHTO	incl			10	40
12-13   Silt loam   CL-ML, ML   A-4   0   0-7   90-100   85-100     12-13   Silt loam   CL-ML, ML   A-4   0   0-7   90-100   85-100     12-23   Silt loam   CL-ML, CL   A-4   0   0-7   90-100   85-100     12-23   Silt loam   CL-ML, CL   A-4   0   0-7   90-100   85-100     12-23   Silt loam   CL-ML, CL   A-4   0   0-7   90-100   85-100     12-23   Silt loam   CL-ML, CL   A-4   0   0-7   50-100   45-100     12-23   Silt loam   CL-ML, CL   A-4   0   0-7   50-100   45-100     12-23   Silt loam   CL-ML, CL   A-2   A-4   0   0-7   50-100   45-100     12-23   Silt loam   CL-ML, CL   A-4   0   0-7   50-100   45-100     12-23   Silt loam   CL-ML, CL   A-4   0   0-7   50-100   45-100     12-24   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-25   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-25   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-25   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-25   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-26   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-26   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-26   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-26   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-26   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-26   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-26   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-26   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-26   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-26   Silt loam   CL-ML, CL   A-4   0   0-7   95-100   90-100     12-26   Silt loam   Silt l		u								
12-12   Silt loam   CL-ML, CL   A-4   0   0-7   90-100   85-100	43D:						- —			
12-19   Silt loam   CL-ML, CL   A-4   0   0-7   90-100   85-100     12-19   Silt loam   CL-ML, CL   A-4   0   0-7   90-100   85-100     19-28   Silt loam   CL-ML, CL   A-4   0   0-7   90-100   85-100     19-28   Silt loam   Sw. SC-SW, ML A-1, A-2, A-4   0   0-7   90-100   85-100     19-28   Silt loam   Sw. SC-SW, ML A-1, A-2, A-4   0   0-7   90-100   85-100     19-34   Sandy loam   Sw. ML, SC-SW   A-1, A-2, A-4   0   0-7   50-100   45-100     19-34   Sandy loam   Sw. ML, SC-SW   A-1, A-2, A-3   0   0-7   50-100   45-100     19-34   Sandy loam   Sw. ML, SC-SW   A-1, A-2, A-3   0   0-7   50-100   45-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   59-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   59-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   59-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   59-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   59-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   59-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   59-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   59-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   59-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   59-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   59-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   59-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   59-100   90-100     19-35   Coarse sand   CL-ML, CL   A-1, A-2, A-3   0   0-7   45-100   40-95     10-0am   Sarvelly   SW   SW   SW   SW   SW   SW   SW   S	Antigo	6-0	Silt loam	ML, CL-ML	A-4	0	0-7	90-100	85-100	70-10
13-19   Silt loam   CL-ML, CL   A-4   0   0-7   90-100   85-100     19-28   Silt loam, sandy   SK, SC-SK, ML   A-1, A-2, A-4   0   0-7   50-100   85-100     19-28   Silt loam, fine,   SRK, SC-SK, ML   A-1, A-2, A-4   0   0-7   50-100   45-100     19-28   Silt loam, gandy   SK, SC-SK, ML   A-1, A-2, A-4   0   0-7   50-100   45-100     19-28   Silt loam, sandy   SK, ML, SC-SK   A-1, A-2, A-4   0   0-7   50-100   45-100     19-34   Silt loam   SK, ML, SC-SK   A-1, A-2, A-3   0   0-7   50-100   45-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   55-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   55-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   55-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   55-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   55-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   55-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   55-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   55-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   55-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   55-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   55-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   55-100   90-100     19-34   Silt loam   CL-ML, CL   A-4   0   0-7   55-100   90-100     19-34   Silt loam		9-12	Silt loam	CL-ML, ML	A-4	0	0-7	90-100	85-100	70-10
19-28   Silt loam   CL-ML, CL   A-4   0   0-7   90-100   85-100	_	12-19	Silt loam		A-4	o —	0-7	90-100	85-100	70-10
28-31   Loam, sandy   SM, SC-SM, ML A-1, A-2, A-4   0   0-7   50-100   45-100     10-am, very   10	_	19-28	Silt loam		A-4	0	0-7	90-100	85-100	70-10
Sandy loam, fine   Sandy loam,   Gravelly sandy   Sandy loam,   Gravelly sandy   Gravelly sandy   Gravelly sandy   Gravelly sandy   Gravelly sandy   Gravelly sandy   Gravelly sandy   Gravelly loam,   Gravelly	_	28-31				_	0-7	50-100	45-100	35-85
Sandy loam,   Gravelly loam,   Gravelly								_		
					_	_	_			
Gravelly sandy   Gravelly fine   Sn. ML, SC-SM   A-1, A-2, A-4   0   0-7   50-100   45-100			gravelly loam,				_			
Stavelly fine   Stavelly fine   Standy loam, very   Standy loam, very   Standy loam, very   Standy loam, sandy loam, sandy loam, sandy loam, sandy loam, sandy   SP-SK, GP-GM   A-1, A-2, A-3   O   O-7   SO-100   45-100			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
100m, Very gravelly fine   sandy loam   31-33   Very gravelly fine   sandy loam   sandy loam   sandy loam, fine   sandy loam, fine   sandy loam, gravelly sandy   sandy loam, gravelly sandy   sandy loam, sandy   sandy loam, sandy   sandy loam, sandy   sandy loam   sandy loam   sandy loam   sandy loam   sandy loam   sandy loam   sandy loam   sandy loam   sp. 6m			gravelly sammy							
31-33   Very gravelly file   Sc.SM   A-1, A-2, A-4   0   0-7   SO-100   45-100			loam, very							
31-33   Sandy Loam,   Sandy Clam,   Sandy			gravelly fine							
31-33 Very gravelly   SM, ML, SC-SM A-1, A-2, A-4   0   0-7   50-100   45-100     sandy loam,   gravelly loam,   gravelly loam,   gravelly loam,   gravelly loam,   gravelly loam,   gravelly sandy   10-30   gravelly sandy   10-30   gravelly sandy   10-30   gravelly   10-30   gravelly   10-30   gravelly   10-30   gravelly   10-30   gravelly   10-30   gravelly   10-30   gravelly   10-30   gravelly   10-30   gravelly   10-30   gravelly   10-30   10-30   gravelly   10-30   11-10   gravelly   10-30   gravelly   10-30   gravelly   10-30   11-10   10-30   gravelly   10-30			sandy loam			_		_		
Sandy loam,   Sandy loam,   Gravelly loam,   Gravelly loam,   Gravelly sandy   Gravelly sandy   Gravelly sandy   Gravelly sandy   Gravelly sandy   Gravelly sandy   Gravelly sandy   Gravelly   Grav		31-33	Very gravelly	ML,	A-2,		0-1	20-100	45-100	35-85
Sandy loam, fine   Sandy loam, gravelly sandy			sandy toam,							
Sandy loam,   Sandy loam,   Savelly loam, sandy   Ioam sandy   Ioam   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7     10										
Gravelly loam,   Gravelly loam,   Gravelly sandy			sandy loam,					_		
			gravelly loam,		_	_	_	_	_	
10am, sandy   A-1, A-2, A-3   0   0-7     10am   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7     11	_		gravelly sandy		_	_	_	_	_	
100mm   100mm   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7	_					_	_	_	_	
33-60   Stratified sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7     coarse sand   SP-SM, GP-GM   A-4   0   0-7     11-19   Silt loam   CL-ML, CL   A-4   0   0-7     19-34   Silt loam   CL-ML, CL   A-4   0   0-7     19-34   Silt loam   CL-ML, CL   A-4   0   0-7     19-34   Silt loam   CL-ML, CL   A-4   0   0-7     19-35   Loam, fine   CL   A-4   0   0-7     sandy loam, fine   sandy clay   Cay   Cay   Cay     can sandy clay   Cay   Cay   Cay   Cay     coarse sand   GP-GM, GP,   A-1, A-2, A-3   0   0-7     coarse sand   Cay   Cay   Cay   Cay   Cay   Cay     Cay   Ca	_		loam		_	_	_	_		
to very   SP-SM, GP-GM		33-60		SP,	A-2,		0-7		40-95	15-65
				SP-SM,		_		_	-	
coarse sand			gravelly			_		_		
11			Coarse sand				_	_		
11-19   Silt loam   CL-ML, CL   A-4   0   0-7     11-19   Silt loam   CL-ML, CL   A-4   0   0-7     11-19   Silt loam   CL-ML, CL   A-4   0   0-7     19-34   Silt loam   CL   A-4   0   0-7     19-34   Silt loam   CL   A-4   0   0-7     19-38   Loam, sandy   SM, ML, SC-SM   A-1, A-2, A-4   0   0-7										
No.	48A:									
Silt loam         CL-ML, ML, CL A-4         0         0-7           Silt loam         CL-ML, CL A-4         0         0-7           Silt loam         CL ML, CL A-4, A-6         0         0-7           Loam, sandy         SM, ML, SC-SM A-1, A-2, A-4         0         0-7           loam, fine         Sm, ML, SC-SM A-1, A-2, A-4         0         0-7           gravelly loam, gravelly         Sandy clay         8         0         0-7           loam, gravelly         Sandy clay         8         0         0-7           to oam         Stratified sand GP-GM, GP, A-1, A-2, A-3         0         0-7           to very         SP, SP-SM         A-1, A-2, A-3         0         0-7           gravelly         coarse sand         A-1, A-2, A-3         0         0-7	Brill	0-7			A-4	0	0-7	95-100	90-100	70-10
Silt loam         CL-ML, CL         A-4         0         0-7           Silt loam         CL         A-4, A-6         0         0-7           Loam, sandy         SM, ML, SC-SM A-1, A-2, A-4         0         0-7           loam, fine         Smooth         A-1, A-2, A-4         0         0-7           gravelly loam, gravelly loam, gravelly         Sandy clay         A-1, A-2, A-3         0         0-7           loam         Stratified sand GP-GM, GP, A-1, A-2, A-3         0         0-7           to very         SP, SP-SM         A-1, A-2, A-3         0         0-7           gravelly         coarse sand         Coarse sand <td></td> <td>7-11</td> <td>Silt loam</td> <td>ML,</td> <td>L A-4</td> <td>0</td> <td>0-7</td> <td>95-100</td> <td>90-100</td> <td>70-10</td>		7-11	Silt loam	ML,	L A-4	0	0-7	95-100	90-100	70-10
Silt loam   CL   A-4, A-6   0   0-7     Loam, sandy   SM, ML, SC-SM   A-1, A-2, A-4   0   0-7     Loam, fine   sandy loam,		11-19	Silt loam		A-4	0	0-7	95-100	90-100	70-10
Loam, sandy   SM, ML, SC-SM   A-1, A-2, A-4   0   0-7     loam, fine		19-34	Silt loam	CL		0	0-7	95-100	90-100	70-10
loam, fine   sandy loam,   gravelly loam,   gravelly sandy   sandy clay   sandy clay   stratified sand   GP-GM, GP,   A-1, A-2, A-3   0   0-7   45-100   40-95   coarse sand   coarse		34-38			A-2,		0-7	50-100	50-100	35-85
gravelly loam,						_		_	-	
gravelly loam,						_		_		
gravelly sandy			gravelly loam,					_		
loam, gravelly    sandy clay			gravelly sandy			_		_		
sandy clay	_				. —	_	_	_	_	
loam	_				_	_	_	_		
Stratified sand GP-GM, GP,  A-1, A-2, A-3  0   0-7   45-100   40-95     to very   SP, SP-SM			loam		_	_	_			
SP,	-	38-60		GP-GM, GP,	A-1, A-2, A	_	0-7	45-100	40-95	15-65
and —			to very	SP, SP-SM		_	_	_		
coarse sand	_		gravelly			_				
			Coarse sand							

Table 23. -- Engineering Index Properties -- Continued

Map symbol	Depth	USDA texture	Classification	cation	Fragn	Fragments	Per	Percentage pass	pass
	: : : : :				>10	3-10			
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	H				Pct	Pct			
63A:									
Crystal Lake	8-0	Silt loam	CL, CL-ML, ML A-4,		0	0	98-100	98-100   95-100   90-10	90-10
	8-12	Silt loam	CL, ML, CL-ML A-4,		0	0	98-100	98-100   95-100   90-10	90-10
_	12-20	Silt loam,	CI, CL-ML	A-4, A-6	0	0	98-100	98-100   95-100	90-10
		silty clay	_		_				
_		loam			_				
	20-32	Silt loam,	CI	A-6, A-4	0	0	98-100	98-100 95-100	90-10
		silty clay	_		_	_	_		
		loam			_				
	32-60	Stratified silt CL,	CL, ML, CL-ML A-4	A-4	0	0	98-100	98-100   95-100   85-10	85-10
		loam to very			_				
		fine sand							
63B:									
Crystal Lake	8-0	Silt loam	ML, CL-ML, CL	A-4, A-6	0	0	98-100	98-100 95-100	90-10
-	8-12	Silt loam	ML, CL, CL-ML A-4,	A-4, A-6	0	0	98-100	98-100 95-100 90-10	90-10
. —	12-20	Silt loam,	E, CL	A-4, A-6	0	0	98-100	98-100   95-100   90-10	90-10
		silty clay							
		loam			_				
	20-32	Silt loam,	CL	A-6, A-4	0	0	98-100	95-100	90-10
		silty clay							
		loam			_				
_	32-60	Stratified silt CL,	CL-ML, ML	A-4	0	0	98-100	98-100   95-100   85-10	85-10
_		loam to very	_		_				
		fine sand							
630:									
Crystal Lake	8-0	Silt loam	ML, CL-ML, CL	CL A-4, A-6	0	0	98-100	98-100 95-100 90-10	90-10
-	8-12	Silt loam	CL-ML, CL, ML	ML A-4, A-6	0	0	98-100	98-100  95-100  90-10	90-10
	12-20	Silt loam,	CL		0	0	98-100	98-100 95-100	90-10
		silty clay							
		loam			_				
	20-32	Silt loam,	CL	A-4, A-6	0	0	98-100	98-100 95-100	90-10
		silty clay			_				
_		loam	_		_	_	_		
	32-60	Stratified silt ML,	CL, CL-ML	A-4	0	0	98-100	98-100 95-100 85-10	85-10
_		loam to very	_		_	_	_		
		fine sand			_				
					_		_		

Table 23. -- Engineering Index Properties -- Continued

63E:  Crystal Lake  Crystal Lake  Crystal Lake  Crystal Lake  Crystal Lake  8-12 Silt loam  12-20 Silt loam  12-20 Silt loam  12-20 Silt loam  12-20 Silt loam  12-20 Silt loam  13-60 Stratified silt CL, CL-ML, ML A-4  13-60 Stratified silt CL, CL-ML, ML A-4  14-8 Loamy fine  Sand, loamy  Sand, loamy  Sand, loamy  Sand, loamy  Sand, loamy  Sand, loamy  Sand, loamy  Sand, loamy  Sand, coarse  Sand, loamy  Sand, coarse  Sand, loamy  Sand, coarse  Sand, loamy  Sand,				!	1 0	rcentage pass siem number-	Percentage pass
In   In   In   In   In   In   In   In	0		>10	3-10			
In     CL-ML,	Unified	AASHTO	inches	inches inches	4	10	40
### Silt loam   CL-ML,   8-12   Silt loam   ML, CL,     12-20   Silt loam,   CL     12-20   Silt loam,   CL     12-20   Silt loam,   CL     10am   10am   CL     20-32   Silt loam,   CL     10am   32-60   Stratified silt   CL, CL     10am   10am   Sm     Sm     10am   Sm   Sm   Sm     10am   Sm   Sm   Sm     10am   Sm   Sm   Sm     10am   Sm   Sm   Sm     10am   Sm   Sm   Sm			Pct	Pct			
### Silt loam   CL-ML, CL, CL, CL, CL, CL, CL, CL, CL, CL, C							
## 8-12   Silt loam   ML, CL,     12-20   Silt loam,   CL     20-32   Silt loam,   CL     10-32   Silt loam,   CL     10-32   Silty clay     10-32   Silty clay     10-34   Nuck   PT     10-35   Stratified silt   CL, CL-    10-35   Stratified silt   CL, CL-    10-36   Stratified silt   CL, CL-    10-36   Stratified silt   CL, CL-    10-37   Sand, loamy     17-28   Fine sand,   SM     17-28   Fine sand,   SM     17-28   Fine sand,   Camp     17-28   Sand, loamy     17-28   Sand, fine     17-28   Sand, fine     17-28   Sand, loamy     18-46   Sand, fine     18-46   Sand, loamy     18-48   Sand, loamy     18-48   Sand, loamy     18-48   Sand, loamy	ML,		0	0	98-100 95-100 90-10	95-100	90-10
12-20 20-32 32-60 32-60 17-28 17-28 17-28 4-8 4-8	CL, CL-ML	1-4, A-6	0	0	98-100	95-100   90-10	90-10
20-32 32-60 32-60 17-28 17-28 17-28 4-8 4-8 4-8	CI	A-4, A-6	0	0	98-100	98-100   95-100   90-10	90-10
32-60 32-60 32-60 17-28 17-28 4-8 17-28							
20-32 32-60 32-60 17-28 17-28 17-28 466 17-28							
32-60 agatic 0-4 4-8 17-28 17-28 14-6	J.	A-4, A-6	0	0	98-100 95-100 90-10	95-100	90-10
32-60 agatic 0-4 4-8 17-28 17-28 4-6							
32-60 agatic 0-4 4-8 17-28 17-28	_		_				
agatic  o-4 Muck  4-8 Loamy fine sand, loamy	silt   CL, CL-ML, ML   A	v - 4	0	0	98-100 95-100 85-10	95-100	85-10
agatic 0-4 Muck 4-8 Loamy fine sand, loamy	ery		_		_		
agatic  4-8 Loamy fine sand, loamy sand, fine sand, loamy sand, sand sand, loamy							
agatic  4-8 Loamy fine sand, loamy sand, fine sand, sand sand, loamy sand, loamy fine sand, sand, loamy fine sand 17-28 Fine sand, sand, loamy sand, loamy sand, loamy sand, coarse sand, mucky sand, coarse sand, coarse sand, loamy							
4-8 Loamy fine sand, loamy sand, fine sand, sand sand, loamy sand, loamy fine sand 17-28 Fine sand, sand, loamy sand, coarse sand, mucky sand, fine sand, coarse sand, coarse sand, coarse sand, coarse sand, loamy		00	0	o	100	100	;
sand, fine sand, sand sand, fine sand, sand Fine sand, sand, loamy fine sand Fine sand, sand, loamy sand, coarse sand, fine sand, loamy sand, coarse sand, coarse sand, coarse sand, loamy sand, coarse sand, loamy		2 - 4			100	100	70 - B
sand, fine sand, sand Fine sand, sand, loamy fine sand, fine sand Fine sand, sand, coarse sand, mucky sand Sand, fine sand, coarse sand, mucky sand coarse sand, coarse sand, coarse sand, coarse sand, loamy sand, coarse sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy	No.	1	· 	•	9	) )	
Fine sand, Sand, loamy Sand, loamy fine sand, Fine sand, Sand, loamy Sand, coarse Sand, fine Sand, coarse Sand, mucky Sand, coarse Sand, coarse Sand, loamy Sand, coarse Sand, loamy Sand, loamy Sand, loamy Sand, loamy Sand, loamy Sand, loamy			_				
Fine sand, sand, loamy sand, loamy fine sand, sand, loamy sand, coarse sand, fine sand, loamy sand, coarse sand, mucky sand, coarse sand, loamy sand, coarse sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy			_				
sand, loamy sand, loamy fine sand Fine sand, sand, loamy sand, coarse sand, loamy sand, coarse sand, mucky sand, coarse sand, coarse sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy	SM	A-2	0	0	100	100	50-80
sand, loamy fine sand Fine sand, sand, loamy sand coarse sand, loamy sand, coarse sand, mucky sand, coarse sand, coarse sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy			_		_		
Fine sand Fine sand, sand, loamy sand, coarse sand, mucky sand, loamy sand, coarse sand, coarse sand, coarse sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy	Ku		_				
Fine sand, sand, loamy sand, coarse sand, mucky sand, loamy sand, coarse sand, coarse sand, coarse sand, coarse sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy			_		_		
sand, loamy sand, coarse sand, mucky sand, fine sand, loamy sand, coarse sand, coarse sand, coarse sand, fine sand, loamy sand, fine sand, loamy		A-2, A-3	0	0	100	100	50-80
sand, coarse sand, mucky sand, fine sand, loamy sand, coarse sand, mucky sand, coarse sand, fine sand, loamy sand, fine sand, loamy			_		_		
sand, mucky sand Sand, fine sand, loamy sand, coarse sand, mucky sand, coarse sand, fine sand, fine sand, loamy			_		_		
Sand, fine Sand, loamy sand, loamy sand, mucky Sand, coarse Sand, loamy sand, fine sand, loamy fine sand			_		_		
Sand, fine sand, loamy sand, coarse sand, mucky sand, coarse sand, loamy sand, fine sand, loamy							
sand, loamy sand, coarse sand, mucky sand, coarse Sand, loamy sand, fine sand, loamy	SM	A-2, A-3	0	0	100	100	50-80
sand, coarse sand, mucky sand, mucky Sand, coarse sand, loamy sand, fine sand, loamy							
sand, mucky sand Sand, coarse sand, loamy sand, fine sand, loamy fine sand							
Sand, coarse Sand, loamy sand, fine sand, loamy							
Sand, Coarse sand, loamy sand, fine sand, loamy			_	•	-		
01	WS.	A-2, A-3	0	0	001	T 0 0	50-80
01							
01							
fine sand	Лu						
U	SM	A-2, A-3	0	0	100	100	50-80
	<b>.</b>						
sand, loamy							
fine sand	_		_				

Table 23. -- Engineering Index Properties -- Continued

### Since   Park	Lodmin rew		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Classi	Classification	Fragm	Fragments	Per	Percentage pass	pass
In name   In	and	1				>10	3-10			100
Description	soil name			Unified	AASHTO	inches	inches	4	10	40
Sand, gravelly   SW, SP-SM   A-2-4		п				Pct	Pct			
10	64A:	,								
Sand, gravelly   SN, SF-SM   A-15, A-2-4, 0   0	Winterfield	0-7		SC-SM, SM		0 (	0 0	100	95-100	65-80
loamy sand,   loam,   loam,   loam,   loam,   loam,   loam,   loam,					۲- ۲-					
### Senaw sand   SC, SC-SM, SM   A-2, A-2-4   0-2   0-20										
Senawy sand   SC, SC-SM, SM A-2, A-2, 4   0-2   0-20			. —		_	_				
	69B:			_		_		_		
Sandy loam, SC, SC-SM, SM A-1-b, A-2,   0   0-50     Joamy sand,   SC, SC-SM, SM A-1-b, A-2,   0   0-50     gravelly loamy   SC, SC-SM, SM A-2, A-1-b,   0   0-25     gravelly loamy   SC, SC-SM, SM A-2, A-1-b,   0   0-25     loamy fine   Sand, SP-SM,   A-2, A-1-b   0   0-25     cobbly sand,   SC, SC-SM, SM A-2, A-1-b   0   0-25     cobbly sand,   SC, SC-SM,   A-1-b, A-2,   0   0-25     cobbly sand,   SC, SC-SM,   A-1-b, A-2,   0   0-25     cobbly sand,   SC, SC-SM,   A-1-b, A-2,   0   0-25     cobbly sand,   SC, SC-SM,   SM A-1-b,   0   0-25     cobbly sand,   SC, SC-SM,   SM A-1-b,   0   0-25     cobbly sand,   SC, SC-SM,   SM A-1-b,   A-2,   0   0-25     cobbly sand,   SC, SC-SM,   SM A-1-b,   A-2,   0   0-25     commy sand,   SC, SC-SM,   SM A-1-b,   A-2,   0   0-25     commy sand,   SC, SC-SM,   SM A-1-b,   A-2,   0     commy sand,   SC, SC-SM,   SM A-1-b,   A-2,   0     commy sand,   SC, SC-SM,   SM A-1-b,   A-2,   0     commy sand,   SC, SC-SM,   SM A-1-b,   A-2,   0     commy sand,   SC, SC-SM,   SM A-1-b,   A-2,   0     commy sand,   SC, SC-SM,   SM A-1-b,   A-2,   0     commy sand,   SC, SC-SM,   SM A-1-b,   A-2,   0     commy sand,   SC, SC-SM,   SM A-1-b,   A-2,   0     commy sand,   SC, SC-SM,   SM A-1-b,   A-2,   0     commy sand,   SC, SC-SM,   SM A-1-b,   A-2,   0     commy sand,   SC, SC-SM,	Keweenaw	0-2	Loamy sand	SC-SM,	f A-2, A-2-4	0-2	0-20	90-100	75-100	40-75
Joamy sand,   A-2-4		2-4		SC-SM,	(A-1-b, A-2,	0	0-20	85-100	65-100	45-75
gravelly loamy         fine sand,         0 0-25           cobbly loamy         SC, SC-SM, SM A-2, A-1-b,         0 0-25           gravelly loamy         A-2-4         0 0-25           loamy fine         A-2-4         0 0-25           sand, sand,         SM, SP-SM, A-2, A-1-b         0 0-25           cobbly loamy         SC-SM, SC         A-1-b, A-2, A-1-b         0 0-25           gravelly loamy         SP-SM, SM         A-1-b, A-2, O 0 0-25           cobbly sand, SP-SM, SM         A-2-4         0 0-25           gravelly loamy         SP-SM, SM         A-1-b, A-2, O 0 0-25           fine sand, sand, SC-SM, SM, SP-SM, A-1-b, A-2, O 0 0-25         SC-SM, SM A-1-b, A-2, O 0 0-25           gravelly loamy         SC, SC-SM, SM A-1-b, A-2, O 0 0-25           fine sandy         SC, SC-SM, SM A-1-b, A-2, O 0 0-25           gravelly loam, gravelly         SC, SC-SM, SM A-1-b, A-2, O 0 0-25           loamy sand, SC, SC-SM, SM A-1-b, A-2, O 0 0-25           loamy sand, SC, SC-SM, SM A-1-b, A-2, O 0 0-25           gravelly loamy         SC, SC-SM, SM A-1-b, A-2, O 0 0-25           gravelly loamy         SC, SC-SM, SM A-1-b, A-2, O 0 0-25           gravelly loamy         SC, SC-SM, SM A-1-b, A-2, O 0 0-25			loamy sand,		A-2-4					
fine sand,  cobbly loamy  sand Loamy sand, SC, SC-SM, SM A-2, A-1-b, 0 0-25  gravelly loamy loamy fine sand, sand, loamy sand, SC, SC-SM, A-2, A-1-b, 0 0-25  cobbly loamy sand, sand Loamy sand, SC, SC-SM, A-1-b, A-2, 0 0-25  cobbly sand, SP-SM, A-1-b, A-2, 0 0-25  cobbly sand, SP-SM, SM A-1-b, A-2, 0 0-25  loamy sand, SC-SM, SM A-1-b, A-2, 0 0-25  loamy sand, SC-SM, SM A-1-b, A-2, 0 0-25  sandy loam, SC-SM, SM A-1-b, A-2, 0 0-25  sandy loam, SC-SM, SM A-1-b, A-2, 0 0-25  gravelly loamy fine sand, loamy sand, SC, SC-SM, SM A-1-b, A-2, 0 0-25  sandy loam, gravelly loamy fine sand Loamy sand, SC, SC-SM, SM A-1-b, A-2, 0 0-25  gravelly loamy fine sandy sand, SC, SC-SM, SM A-1-b, A-2, 0 0-25  gravelly loamy fine sand Loamy sand, SC, SC-SM, A-1-b, A-2, 0 0-25  gravelly loamy fine sand cobbly sand, cobbly sand, cobbly sand, cobbly sand, cobbly sand, cobbly			gravelly loamy							
Cobbly loamy   SC, SC-SM, SM   A-2, A-1-b,   O   O-25     gravelly loamy   A-2, A-1-b,   O   O-25     sand, cobbly   SM, SP-SM,   A-2, A-1-b   O   O-25     loamy fine			fine sand,							
Loamy sand,   SC, SC-SM, SM   A-2, A-1-b,   O   O-25     gravelly loamy   A-2, A-1-b,   O   O-25     loamy fine   Sand,   SN, SP-SM,   A-2, A-1-b   O   O-25     loamy sand,   SM, SP-SM,   A-2, A-1-b   O   O-25     cobbly loamy   SC-SM, SM   A-2-4   O   O-25     cobbly sand,   SP-SM,   A-1-b, A-2,   O   O-25     cobbly sand,   SP-SM,   A-1-b, A-2,   O   O-25     cobbly sand,   SP-SM,   A-1-b, A-2,   O   O-25     cobbly sand,   SC-SM, SM   A-1-b, A-2,   O   O-25     comy sand,   SC-SM, SM   A-1-b, A-2,   O   O-25     comy sand,   SC, SC-SM, SM   A-1-b, A-2,   O   O-25     comy sand,   SC, SC-SM,   SM   A-1-b, A-2,   O   O-25     comy sand,   SC, SC-SM,   A-1-b, A-2,   O   O-25     comy sand,   SC, SC-SM,   A-1-b, A-2,   O   O-25     comy sand,   SC, SC-SM,   A-1-b, A-2,   O   O-25     comy sand,   SC, SC-SM,   A-1-b, A-2,   O   O-25     comy sand,   SC, SC-SM,   A-1-b, A-2,   O   O-25     comy sand,   SC, SC-SM,   A-1-b, A-2,   O   O-25     comy sand,   SC, SC-SM,   A-1-b, A-2,   O   O-25     cand, cobbly   SM, SP-SM   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     ca			cobbly loamy							
Sandy saind,   Sc, Sc-SM, SM, A-2,4	_	7	Topmir gond	7.0			C C	0	100	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Sand, cobbly   A-2-4     Ioamy fine   Sm, SP-SM, A-2, A-1-b   0     Ioamy sand, SC-SM, SC   A-1-b   0   0-25     Ioamy sand, SC-SM, SM   A-1-b, A-2,   0   0-25     Ioamy sand, SC-SM, SM   A-1-b, A-2,   0   0-25     Ioamy sand, SC-SM, SM   A-2-4     Ioamy sand, SC-SM, SM   A-1-b, A-2,   0   0-25        Isand, cobbly   SM, SP-SM   A-2-4     Isand, cobbly   SM, SP-SM		D 	Loamy saila,	ישמ-טמי, מר	T W-Z, A-I-D,	>	0 - 0	001-00	001-00	
Loamy fine   SM, SP-SM, A-2, A-1-b   0   0-25			gravelly loamy		#-7-W					
Sand, sandy   SM, SP-SM, A-2, A-1-b   0   0-25     Loamy sand,   SC-SM, SC     A-2, A-1-b   0   0-25     Cobbly loamy   SC-SM, SC     A-1-b, A-2,   0   0-25     cobbly sand,   SP-SM, SM   A-2-4     0   0-25     cobbly sand,   SP-SM, SM   A-2-4     0   0-25     cobbly sand,   SC-SM, SC   A-2, A-2-4     0   0-25     cobbly sand,   SC-SM, SC   A-2, A-2-4     0   0-25     cobbly sand,   SC-SM, SM   A-1-b, A-2,   0   0-25     comy sand,   SC, SC-SM, SM   A-1-b, A-2,   0   0-25     comy sand,   SC, SC-SM, SM   A-1-b, A-2,   0   0-25     comy sand,   SC, SC-SM, SM   A-1-b, A-2,   0   0-25     comy sand,   SC, SC-SM,   A-1-b, A-2,   0   0-25     comy sand,   SC, SC-SM,   A-1-b, A-2,   0   0-25     comy sand,   SC, SC-SM,   A-1-b, A-2,   0   0-25     cravelly loamy   SM, SP-SM   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   SM, SP-SM   SM, SP-SM     cobbly   SM, SP-SM   SM, SP-SM	_									
Loamy sand,   SM, SP-SM,   A-2, A-1-b   0   0-25     cobbly loamy   SC-SM, SC										
Loamy sand,   SM, SP-SM,   A-2, A-1-b   0   0-25     cobbly loamy   SC-SM, SC										
Cobbly loamy   SC-SM, SC   Fine sand,   SC-SM, SC   Stand,   Sand, sand   SC, SC-SM,   A-1-b, A-2,   O   O-25   Cobbly sand,   SP-SM, SM   A-2-4   Sand, cobbly   SM, SP-SM,   A-3, A-1-b,   O   O-25   Ioamy sand,   SC-SM, SC   A-2, A-2-4   Sandy loamy   SC-SM, SC   A-2, A-2-4   Sandy loam,   SC, SC-SM, SM   A-1-b, A-2,   O   O-25   Sandy loam,   SC, SC-SM, SM   A-1-b, A-2,   O   O-25   Sandy loam,   SC, SC-SM,   SM   A-1-b, A-2,   O   O-25   Sand,   Sand,   SM, SP-SM   A-2-4   Sand,   SM, SP-SM   A-2-4   Sand,   SM, SP-SM   A-2-4   Sand,   SM, SP-SM   A-2-4   Sand,   SM, SP-SM   SA-2-4   Sand,   Sand,   SM, SP-SM   A-2-4   Sand,   Sand,   SM, SP-SM   SM, SP-SM   Sand,   SM, SP-SM   SA-2-4   Sand,   SM, SP-SM   SA-2-4   Sand,   SM, SP-SM   SA-2-4   Sand,   SM, SP-SM   SA-2-4   Sand,   SM, SP-SM   SA-2-4	-	16-20	Loamy sand,		A-2. A-1-b	0	0-25	85-100	65-100	45-75
fine sand, gravelly loamy   SC, SC-SM, A-1-b, A-2, 0 0-25   cobbly sand, SP-SM, SM A-2-4   0 0-25   gravelly loamy   SM, SP-SM, A-2, A-2-4   fine sand, cobbly   SC-SM, SC A-2, A-2-4   gravelly loamy   SC-SM, SC A-2, A-2-4   fine sand, cobbly   SC, SC-SM, SM A-1-b, A-2, 0 0-25   sandy loam, gravelly   A-2-4   fine sandy   SC, SC-SM, SM A-1-b, A-2, 0 0-25   sandy loam, gravelly   A-2-4   loamy grand, SC, SC-SM, A-1-b, A-2, 0 0-25   gravelly loamy fine   SC, SC-SM, A-1-b, A-2, 0 0-25   gravelly loamy SM, SP-SM   A-2-4   sand, cobbly   SM,	_		cobbly loamy	SC-SM. SC	: .	,				
Sand, sand   SC, SC-SM,   A-1-b, A-2,   0   0-25			fine sand,							
Loamy sand,   SC, SC-SM,   A-1-b, A-2,   0   0-25     cobbly sand,   SP-SM, SM   A-2-4     fine sand   SP-SM, SM   A-3, A-1-b,   0   0-25     loamy sand,   SC-SM, SC   A-2, A-2-4     fine sand,   SC-SM, SC   A-2, A-2-4     fine sand,   SC, SC-SM, SM   A-1-b, A-2,   0   0-25     sandy loam,   SC, SC-SM, SM   A-1-b, A-2,   0   0-25     loamy gand,   SC, SC-SM,   A-1-b, A-2,   0   0-25     sand, cobbly   SM, SP-SM   A-1-b, A-2,   0   0-25     gravelly loamy   SM, SP-SM   A-1-b, A-2,   0   0-25     sand, cobbly   Sm, SP-SM   A-2-4     sand, cobbly   Sm, SP-SM   SP-SM   A-2-4     sand, cobbly   Sm, SP-SM   SP-SM			gravelly loamy	. —	. —	_				
Loamy sand,   SC, SC-SM,   A-1-b, A-2,   0   0-25     cobbly sand,   SP-SM, SM   A-2-4     fine sand   SM, SP-SM,   A-3, A-1-b,   0   0-25     loamy sand,   SC-SM, SM   A-2, A-2-4     fine sand,   SC-SM, SM   A-1-b, A-2,   0   0-25     sandy loam,   SC, SC-SM, SM   A-1-b, A-2,   0   0-25     fine sandy			sand, sand		_					
cobbly sand,         SP-SM, SM         A-2-4           gravelly loamy         SM, SP-SM,         A-3, A-1-b,         0         0-25           sand, cobbly         SC-SM, SC         A-2, A-2-4         0         0-25           gravelly loamy         SC-SM, SC         A-2, A-2-4         0         0-25           sandy loam         SC, SC-SM, SM A-1-b, A-2, 0         0-25         0         0-25           sandy loam, gravelly         A-2-4         0         0-25           loam, gravelly         A-2-4         0         0-25           sand         Loamy sand, SC, SC-SM, A-1-b, A-2, 0         0         0-25           gravelly loamy         SM, SP-SM A-1-b, A-2, 0         0         0-25           gravelly loamy         SM, SP-SM A-1-b, A-2, 0         0         0-25		20-27	Loamy sand,		A-1-b, A-2,	0	0-25	85-100	65-100	45-75
fine sand         A-3, A-1-b, O         0-25           Sand, cobbly         SK, SP-SM, A-2, A-2-4         0         0-25           loamy sand, sandy loam         SC, SC-SM, SM A-1-b, A-2, O         0         0-25           sandy loam, gravelly         A-2-4         0         0-25           loam, gravelly         A-2-4         0         0-25           loam, gravelly         A-2-4         0         0-25           gravelly loamy         SC, SC-SM, A-1-b, A-2, O         0         0-25           gravelly loamy         SM, SP-SM A-1-b, A-2, O         0         0-25           gravelly loamy         SM, SP-SM A-2-4         0         0-25           sand, cobbly         sand         A-2-4         0         0-25	_		cobbly sand,	SP-SM, SM	A-2-4	_				
fine sand   Sand, cobbly   SM, SP-SM,   A-3, A-1-b,   0   0-25     loamy sand,   SC-SM, SC   A-2, A-2-4     gravelly loamy   SC, SC-SM, SM   A-1-b, A-2,   0   0-25     sandy loam   SC, SC-SM, SM   A-1-b, A-2,   0   0-25     loam, gravelly	_		gravelly loamy	_	_	_				
Sand, cobbly   SM, SP-SM,   A-3, A-1-b,   0   0-25     loamy sand,   SC-SM, SC   A-2, A-2-4     gravelly loamy	_			_	_	_		_		
Joamy sand,   SC-SM, SC   A-2, A-2-4		27-43		SM, SP-SM,	A-3, A-1-b,	0	0-25	85-100	65-100	40-80
gravelly loamy         fine sand,         sandy loam         Loamy sand,       SC, SC-SM, SM A-1-b, A-2,       0 0-25         sandy loam,       A-2-4         fine sandy                 loam, gravelly                 sand       SC, SC-SM, A-1-b, A-2,       0 0-25         gravelly loamy       SM, SP-SM A-2-4         sand, cobbly       sand			loamy sand,	SC-SM, SC	A-2, A-2-4					
Sandy loam			gravelly loamy							
Loamy sand,   SC, SC-SM, SM   A-1-b, A-2,   0   0-25			rine sand,							
Loamy sand, SC, SC-SM, SM A-1-D, A-2, 0 0-25 sandy loam, gravelly			sandy loam					, i		
fine sandy		43-75	Loamy sand,	SC-SM,		0	0-25	85-100		45-80
Loam, gravelly	_		fine gandu		A-2-4					
Loamy fine										
Second   S										
Saind   SC, SC-SM,   A-1-b, A-2,   0   0-25										
gravelly loamy SM, SP-SM   A-2-4   c-23   sand	_	100	Topmir gond	7		•	C C	0	100	75 75
cobbly		00101	Loamy Sauce,	נ טֿנ	A-T-D, A-Z,	>	0 -	001-00	001	0 / 1 0 #
			graveriy roamy	, mag	r 1 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
	_									

Table 23.--Engineering Index Properties--Continued

[Odmys ceM	Den t	TSD + AUST	Classif	Classification	Fragments	ents	Per	Percentage pass	pass mher-
and	1 14 1)				>10	3-10			
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	In				Pct	Pct			
69B:									
Sayner	0-2	Loamy sand	SM	A-1	0-2	0-15	85-100	85-100   75-100	45-75
_	2-4	Loamy sand,	SP-SM, SM	A-1	0	0-15	85-100	85-100 75-100 40-75	40-75
_		sand		_					
	4-7	Loamy sand,	SM, SP-SM	A-1, A-3	0	0-15	70-100	70-100   50-100   25-75	25-75
_		sand, gravelly		_					
_		coarse sand,		_					
		loamy coarse		_	_		_	_	
		sand			_			_	
_	7-14	Sand, loamy	SP-SM, SM	A-1, A-3	0	0-15	70-100	70-100   50-100   25-75	25-75
_		sand, gravelly		_					
		sand, loamy			_			_	
_		coarse sand		_					
_	14-22	Gravelly sand,	SP-SM, SM, SP	A-1, A-3	0	0-15	70-100	70-100   50-100	25-75
_		loamy sand,		_					
		coarse sand,		_	_		_	_	
_		loamy coarse			_		_	_	
_		sand			_			_	
_	22-60	Stratified sand	SP, SP-SM	A-1	0	0-15	60-85	40-85	25-45
		to very		_					
		gravelly		_	_		_	_	
		coarse sand							
Vilas	0-2	Loamy sand	SM	A-1-b, A-2-4	0-2	0	80-100	80-100   75-100   30-75	30-75
	2-4	Loamy sand	SP-SM, SM	A-1-b, A-2-4,	0	0	80-100	80-100 75-100 30-75	30-75
				A-3	_			_	
_	4-11	Loamy sand	SM	A-1-b, A-2-4	0	0	80-100	80-100   75-100   30-75	30-75
_	11-23	Sand, loamy	SM, SP-SM	A-1-b, A-2-4,	0	0	80-100	80-100   75-100   20-75	20-75
		sand		A-3	_		_	_	
_	23-32	Sand	SP-SM, SM	A-1-b, A-2-4,	0	0	80-100	80-100   75-100   20-70	20-70
_		_		A-3	_		_	_	
	32-80	Sand	SM, SP-SM	A-1-b, A-2-4,	0	0	80-100	80-100   75-100   20-70	20-70
_		_		A-3	_			_	
		_			_		_	_	

Table 23. -- Engineering Index Properties -- Continued

-	Depth	USDA t	USDA texture					1 4	r agmentes	7 D D	rercentage pass sieve number-	pass mber-
and						_		>10	3-10			
soil name				Þ	Unified	_	AASHTO	inches inches	inches	4	10	40
	uI							Pct	Pct			
:069												
Keweenaw	0-2	Loamy sand	and			SC A-	SC A-2, A-2-4	0-2	0-20	90-100 75-100 40-75	75-100	40-75
_	2-4	Cobbly loamy	loamy	SM,	SC-SM,	SC A-	SC A-1-b, A-2,	0	0-20	85-100 65-100 45-75	65-100	45-75
		sand,	sandy			4	A-2-4	_		_		
		loam,	loamy			_		_				
		sand,	gravelly			_		_		_		
_		loamy	fine			_		_				
		sand				_						
_	4-16	Cobbly loamy	loamy	SM,	SC-SM,	SC A-	SC A-2, A-1-b,	0	0-25	85-100 65-100	65-100	45-75
_		fine sand,	and,			4	A-2-4	_		_		
_		sandy loam,	loam,			_		_		_		
		loamy sand,	sand,			_						
		gravel	gravelly loamy			_						
		sand				_						
	16-20	Loamy sand,	and,	sc,	SC, SC-SM,	A-	A-2, A-1-b	0	0-25	85-100 65-100	65-100	45-75
		cobbly loamy	loamy	SM,	SP-SM	_						
		fine sand,	and,			_						
_		gravel	gravelly loamy			_						
_		sand, sand	sand									
	0		7	2	ָרָ הַ בַּי		, ,	•	i c	00.	200	7 7 7
	77-07	Loamy sand,	ana,	, E	SM, SF-SM,	4 -	A-I-D, A-Z,	>	0-43	00T-68	00T-C9	
		cobbiy sand,	sand,	ב	SC-SM' SC	<b>4</b> — -	A-2-4					
		gravel	gravelly loamy									
		rine sand	ana	1							1	
	27-43	Sand, c	coppTy	sc,	SC-SM,	4	A-3, A-1-b,	o	0-25	85-T00	00T-69	40-80
		loamy sand,	sand,	SM,	SP-SM	<b>4</b>	A-2, A-2-4					
		gravel	gravelly loamy			_						
		fine sand,	and,			_						
_		sandy loam	loam			_		_				
	43-75	Loamy sand,	and,	sc,	SC-SM,	SM A-1-b,	1-b, A-2,	0	0-25	85-100	65-100	45-80
_		sandy loam,	loam,			4	A-2-4	_		_		
		gravel	gravelly loamy			_						
		fine sand,	and,			_						
		fine s	sandy			_						
		loam				_						
	75-80	Loamy sand,	and,	SC-SM,	M, SM,	A-	A-1-b, A-2,	0	0-25	85-100 65-100	65-100	45-75
		gravel	gravelly loamy	SP-	SP-SM, SC	4	A-2-4					
		sand,	cobbly			_						
			1			-						

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	Classification	Fragments	ents	Per	Percentage pass sieve number-	pass
and	4			_	>10	3-10			
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	ä				Pct	Pct			
:069									
Sayner	0-2	Loamy sand	SM	A-1	0-2	0-15	85-100	75-100	45-75
	2-4	Loamy sand,	SP-SM, SM	A-1	o 	0-15	85-100	85-100   75-100   40-75	40-75
_		sand			_				
	4-7	Loamy sand,	SP-SM, SM	A-1, A-3	o 	0-15	70-100	70-100   50-100   25-75	25-75
_		sand, gravelly			_				
_		coarse sand,							
_		loamy coarse			_			_	
_		sand		_	_				
	7-14	Sand, loamy	SM, SP-SM	A-1, A-3	0	0-15	70-100	70-100   50-100   25-75	25-75
		sand, gravelly		_	_				
_		sand, loamy		_	_				
_		coarse sand		_	_				
_	14-22	Gravelly sand,	SP-SM, SP, SM	SM A-1, A-3	0	0-15	70-100	70-100   50-100	25-75
		loamy sand,		_	_			_	
_		coarse sand,		_	_				
		loamy coarse		_	_		_		
		sand		_	_		_		
	22-60	Stratified sand SP, SP-SM	SP, SP-SM	A-1	0	0-15	60-85	40-85	25-45
		to very		_	_				
_		gravelly		_	_		_	_	
		coarse sand							
Vilas	0-2	Loamy sand	SM	A-1-b, A-2-4	0-2	0	80-100	80-100 75-100 30-75	30-75
	2-4	Loamy sand	SP-SM, SM	A-1-b, A-2-4	0	0	80-100	80-100   75-100   30-75	30-75
		. —		A-3	_		_		
	4-11	Loamy sand	SM	A-1-b, A-2-4	_	0	80-100	80-100   75-100   30-75	30-75
	11-23	Sand, loamy	SP-SM, SM	A-1-b, A-2-4	0	0	80-100	80-100 75-100 20-75	20-75
		sand		A-3	_				
_	23-32	Sand	SM, SP-SM	A-1-b, A-2-4	0 -	0	80-100	80-100 75-100 20-70	20-70
				A-3	_		_	_	
	32-80	Sand	SM, SP-SM	A-1-b, A-2-4,	o 	0	80-100	80-100   75-100   20-70	20-70
				A-3					
_		_			_		_	_	

Table 23.--Engineering Index Properties--Continued

Men gambol		אפיויייס + מתפוו	Classification	ication	Fragments	nents	Рег	Percentage pass	pass
and and		בפירוד פ			>10	3-10	1	0	IIIDEL -
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	ų.				Pct	Pct			
69E:									
Keweenaw	0-2	Loamy sand		SC, SC-SM A-2, A-2-4	0-2	0-20	90-100	90-100   75-100   40-75	40-75
	2-4	Loamy sand,	SM, SC-SM, SC	SC-SM, SC A-1-b, A-2,	0	0-20	85-100	85-100   65-100   45-75	45-75
	_	gravelly loamy	_	A-2-4	_			_	
	_	fine sand,	_		_		_	_	
	_	sandy loam,	_		_				
		cobbly loamy							
		sand							
	4-16	Sandy loam,	SC, SC-SM, SM	SM A-2, A-1-b,	0	0-25	85-100	85-100 65-100	45-75
	_	cobbly loamy		A-2-4					
		fine sand,							
		רמשה לישבט [							
		grama lu loami							
		graveriy roamy							
	,	sand		, , , , , , , , , , , , , , , , , , ,		C	L C		, ,
	T9-70	Loamy sand,	SC, SM,	A-2, A-1-D	> -	0-70	82-T00	001-69 001-68	45-75
		cobbly loamy	SC-SM, SP-SM						
		fine sand,							
	_	gravelly loamy	_		_		_	_	
		sand, sand	_		_				
	20-27	Loamy sand,	SC-SM, SC,	A-1-b, A-2,	0	0-25	85-100	65-100	45-75
		cobbly sand,	SM, SP-SM	A-2-4	_			_	
	_	gravelly loamy	_		_				
	_	fine sand	_	_	_				
	27-43	Sand, cobbly	SC-SM, SC,	A-3, A-1-b,	0	0-25	85-100	65-100	40-80
		loamy sand,	SM, SP-SM	A-2, A-2-4	_			_	
	_	gravelly loamy	_	_	_				
		fine sand,							
		sandy loam							
	43-75	Loamy sand,	SC, SC-SM, SM	SM A-1-b, A-2,	0	0-25	85-100	85-100 65-100	45-80
		sandy loam,		A-2-4					
		fine sandy							
		loam, gravelly							
		loamy fine							
		sand							
	75-80	Loamy sand,	SP-SM, SM,	A-1-b, A-2,	0	0-25	85-100	85-100 65-100	45-75
		gravelly loamy		A-2-4					
		sand, cobbly							
	_	sand							
	_		_						

Table 23. -- Engineering Index Properties -- Continued

	, 1	4	Classi	Classification	Fragments	ents	Per	Percentage	pass
map symbor and	Depth	USDA CEXCUIE			>10	3-10		sieve number	- recur
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	п				Pct	Pct			
69E:									
Sayner	0-2			A-1	0-2	0-15	85-100 75-100 45-75	75-100	45-75
	2-4	Loamy sand,	SP-SM, SM	A-1	0	0-15	85-100	75-100	40-75
	4 - 7	Loamy sand.	SM. SP-SM	A-1. A-3	c	0-15	70-100 50-100		25-75
		-	!						
		Ψ							
_		sand					_	_	
_	7-14	Sand, loamy	SM, SP-SM	A-1, A-3	0	0-15	70-100	50-100	25-75
_		sand, gravelly					_	_	
_		sand, loamy		_			_	_	
_		coarse sand		_	_		_		
_	14-22	Gravelly sand,	SM, SP, SP-S	SP-SM A-1, A-3	0	0-15	70-100	50-100	25-75
_		loamy sand,		_	_		_		
_		coarse sand,		_			_	_	
_		loamy coarse		_			_	_	
_		sand		_			_		
_	22-60	Stratified sand	SP, SP-SM	A-1	0	0-15	60-85	40-85	25-45
		to very		_				_	
_		gravelly		_	_		_	_	
		coarse sand							
2 C 722	c		20			c	0	1	7
	7 .				1 (	> 0	001100	0 0 0	1 0
	Z - Z	Loamy sand	SM, SP-SM	A-1-D, A-2-4,	<b>o</b>	0	001-9/ 001-08		30-75
	4-11	Loamy sand	SM	A-1-b, A-2-4	0	0	80-100 75-100	75-100	30-75
	11-23		MS - GS				80-100 75-100 20-75	75-100	20-75
					,	,			)
	23-32	Sand	SM, SP-SM	A-1-b, A-2-4,	0	0	80-100 75-100	75-100	20-70
								_	
	32-80	Sand	SM, SP-SM	A-1-b, A-2-4,	0	0	80-100 75-100	75-100	20-70
-		_		A-3				_	
/4B: Vilag	0-0	Crea Sme C.T	N	A-1-4 A-1-4	c	c	001-08	75-100	30-75
3	1 4 - 6		SM. SP.SM		, ,	o c	80-100 75-100 30-75	75-100	30-75
	1				,	•	9	9	
	4-11	Loamy sand	SM	A-1-b, A-2-4	0	0	80-100 75-100	75-100	30-75
	11-23		SM, SP-SM		0	0	80-100 75-100	75-100	20-75
			1						
	23-32	Sand	SP-SM, SM	A-1-b, A-2-4,	0	0	80-100	80-100 75-100 20-70	20-70
-	32-80	Sand	SP-SM, SM	A-1-b, A-2-4,	0	0	80-100 75-100		20-70
_		_		A-3			_	_	
_		_		_	_		_	_	

Table 23. -- Engineering Index Properties -- Continued

and  In  In  In  In  In  In  In  In  In	Map symbol	Depth	USDA	texture	Classi	Classification	Fragi	Fragments	Per	Percentage pass sieve number-	pass
11   12   12   12   12   13   14   15   15   15   15   15   15   15	and	•			Thified	CHHRAA	\\ \\ \	3-10		0	40
11-23   Sand, loamy sand   SM		H			3		Pct	Pct		i	
11-23   Sand   SP-SM, SM   A-1-b, A-2-4   0   0   80-100   75-10											
11-23   Sand   SP-SM, SM   A-1b, A-2-4   0   0   80-100   75-100     11-23   Sand, loamy sand   SM   A-1b, A-2-4   0   0   80-100   75-100     12-32   Sand   SM, SP-SM   A-1b, A-2-4   0   0   80-100   75-100     13-80   Sand   SM, SP-SM   A-1b, A-2-4   0   0   80-100   75-100     11-23   Sand   SM, SP-SM   A-1b, A-2-4   0   0   80-100   75-100     11-23   Sand   SM, SP-SM   A-1b, A-2-4   0   0   80-100   75-100     11-24   Loamy sand   SM   A-1b, A-2-4   0   0   80-100   75-100     11-25   Sand   SM, SP-SM   A-1b, A-2-4   0   0   80-100   75-100     11-25   Sand   SM, SP-SM   A-1b, A-2-4   0   0   80-100   75-100     11-25   Sand   SM, SP-SM   A-1b, A-2-4   0   0   80-100   75-100     11-25   Sand   SM, SP-SM   A-1b, A-2-4   0   0   80-100   75-100     11-26   Sand   SM, SP-SM   A-1b, A-2-4   0   0   80-100   75-100     11-27   Sand   SM, SP-SM   A-1b, A-2-4   0   0   80-100   75-100     11-28   Sand   SM, SP-SM   A-1b, A-2-4   0   0   80-100   75-100     11-29   Sand   SM, SP-SM   A-1b, A-2-4   0   0   80-100   75-100     11-20   Sand   SM, SP-SM   A-1b, A-2-4   0   0   95-100   85-100     11-20   Sand   SM, SP-SM   A-1b, A-2-4   0   0   95-100   85-100     11-20   Sand   SM, SP-SM   A-2, A-3   0   0   95-100   85-100     11-20   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     11-20   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     11-20   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     11-20   Sand   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     11-20   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     11-20   Sand   Sand   SM   A-2, A-3   0   0   95-100     11-20   Sand   Sand   Sand   SM   A-2, A-3   0   0   95-100     11-20   Sand   Sand   Sand   SM   A-2, A-3   0   0   95-100     11-20   Sand   Sand   Sand   SM   A-2, A-3   0   0   95-100     11-20   Sand   Sand   Sand   SM   A-2, A-3   0   0   95-100     11-20   Sand   Sand   SM   A-2, A-3   0   0   95-100     11-20   Sand   Sand   SM   A-2, A-3   0   0   95-100     11-20   Sand   Sand   SM   A-2, A-3	Vilas	0-2	Loamy	sand	SM			0	80-100	75-100	30-75
11-23   Sand   SM   A-1-b, A-2-4   0   0   80-100   75-100     13-28   Sand   Sm, SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     23-32   Sand   Sm, SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     32-80   Sand   SM, SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     32-80   Sand   SM, SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     4-11   Loamy sand   SM   A-1-b, A-2-4   0   0   80-100   75-100     4-11   Loamy sand   SM   A-1-b, A-2-4   0   0   80-100   75-100     4-11   Loamy sand   SM   A-1-b, A-2-4   0   0   80-100   75-100     4-11   Loamy sand   SM   SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     4-11   Loamy sand   SM   SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     4-12   Sand   SM   SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     4-13   Sand   SM   SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     4-14   Loamy sand   SM   SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     4-15   Sand   SM   SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     4-16   Sand   SM   SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     4-17   Sand   SM   A-2, A-3   0   0   95-100   85-100     4-18   Sand   SM   A-2, A-3   0   0   95-100   85-100     4-19   Sand   SM   A-2, A-3   0   0   95-100   85-100     4-10   Sand   SM   A-2, A-3   0   0   95-100     4-10   Sand   SM   A-2, A-3   0   0   95-100     4-10   Sand   SM   A-2, A-3   0   0   95-100     5-10   Sand   Sand   SM   A-2, A-3   0   0   95-100     5-10   Sand   Sand   SM   A-2, A-3   0   0   95-100     5-10   Sand   Sand   SM   A-2, A-3   0   0   95-100     5-10   Sand   Sand   SM   A-2, A-3   0   0   95-100     5-10   Sand   SM   A-2, A-3   0   0   95-100     5-10   Sand   SM   A-2, A-3   0   0   95-100     5-10   Sand   Sand   SM   SM   A-2, A-3   0   0   95-100     5-10   Sand   Sand   SM   A-2, A-3   0   0   95-100     5-10   Sand   Sand   SM   A-2, A-3   0   0   95-100     5-10   Sand   Sand   SM   A-2, A-3   0   0   95-100     5-10   Sand   Sand   SM   A-2, A-3   0   0   95-100     5-10   Sand   Sand   SM   SM   A-2, A-3   0   0   95-100	_	2-4	Loamy	sand			_	0	80-100	75-100	30-75
11-23   Sand, loamy   SP.SM, SR   A-1-D, A-2-4   0   0   80-100   75-100     13-32   Sand, loamy   SP.SM, SR   A-1-D, A-2-4   0   0   80-100   75-100     23-32   Sand, loamy   SP.SM, SR   A-1-D, A-2-4   0   0   80-100   75-100     32-80   Sand   SP.SM, SR   A-1-D, A-2-4   0   0   80-100   75-100     4-11   Loamy sand   SM   A-1-D, A-2-4   0   0   80-100   75-100     4-11   Loamy sand   SM   A-1-D, A-2-4   0   0   80-100   75-100     4-11   Loamy sand   SM   SP.SM, SR   A-1-D, A-2-4   0   0   80-100   75-100     4-12   Sand   SP.SM, SR   A-1-D, A-2-4   0   0   80-100   75-100     4-13   Sand   SP.SM, SR   A-1-D, A-2-4   0   0   80-100   75-100     4-13   Sand   SP.SM, SR   A-1-D, A-2-4   0   0   80-100   75-100     4-14   Loamy sand   SM   SP.SM   A-1-D, A-2-4   0   0   80-100   75-100     4-15   Sand   SP.SM, SR   A-1-D, A-2-4   0   0   80-100   75-100     4-16   Sand   SP.SM, SR   A-1-D, A-2-4   0   0   80-100   75-100     4-16   Sand   SP.SM, SR   A-1-D, A-2-4   0   0   80-100   75-100     4-16   Sand   SP.SM, SR   A-1-D, A-2-4   0   0   95-100   85-100     4-16   Sand   SP.SM, SR   A-1-D, A-2-4   0   0   95-100   85-100     4-17   Sand   SP.SM, SR   A-1-D, A-2-4   0   0   95-100   85-100     4-18   SP.SM, SR   SP.SM, SR   A-1-D, A-2-4   0   0   95-100   85-100     4-18   SP.SM, SR   A-1-D, A-2-4   0   0   0   95-100     4-19   SP.SM, SR   A-1-D, A-2-4   0   0   0   95-100     4-10   SP.SM, SR   A-1-D, A-2-4   0   0   0   95-100     4-10   SP.SM, SR   A-1-D, A-2-4   0   0   0   95-100     5-10   SP.SM, SR   A-1-D, A-2-4   0   0   0   95-100     5-10   SP.SM, SR   A-1-D, A-2-4   0   0   0   95-100     5-10   SP.SM, SR   A-1-D, A-2-4   0   0   0   95-100     5-10   SP.SM, SR   A-1-D, A-2-4   0   0   0   95-100     5-10   SP.SM, SR   A-1-D, A-2-4   0   0   0   95-100     5-10   SP.SM, SR   A-1-D, A-2-4   0   0   0   95-100     5-10   SP.SM, SR   A-1-D, A-2-4   0   0   0   95-100     5-10   SP.SM, SR   A-1-D, A-2-4   0   0   0   95-100     5-10   SP.SM, SR   A-1-D, A-2-M, SR   A-1-D, A-2-M, SR   A-1-D, A-2-M, S										;	
11-23   Sand, loamy   SP-SM, SM   A-1-b, A-2-4, 0   0   0   0   0   0   0     23-32   Sand   Sand   SM, SP-SM   A-1-b, A-2-4, 0   0   0   0   0   0   0   0     32-80   Sand   SM, SP-SM   A-1-b, A-2-4, 0   0   0   0   0   0   0     4-11   Loamy sand   SM   A-1-b, A-2-4, 0   0   0   0   0   0   0     11-23   Sand, loamy   SM, SP-SM   A-1-b, A-2-4, 0   0   0   0   0   0   0     13-80   Sand, loamy   SM, SP-SM   A-1-b, A-2-4, 0   0   0   0   0   0   0     32-80   Sand, loamy   SM, SP-SM   A-1-b, A-2-4, 0   0   0   0   0   0     13-80   Sand, loamy   SM, SP-SM   A-1-b, A-2-4, 0   0   0   0   0   0     14-11   Loamy sand   SM   A-1-b, A-2-4, 0   0   0   0   0   0     15-100   Sand, loamy   SM, SP-SM   A-1-b, A-2-4, 0   0   0   0   0   0     15-100   Sand, loamy   SM, SP-SM   A-1-b, A-2-4, 0   0   0   0   0   0     15-100   Sand, loamy   SM   A-1-b, A-2-4, 0   0   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2, A-3   0   0   0     15-100   Sand, loamy   SM   A-2		4-11	Loamy	sand			_	0	80-100	75-100	30-75
13-32   Sand   SM, SP-SM   A-1-b, A-2-4,   0   0   80-100   75-100		11-23	Sand,	loamy				0	80-100	75-100	20-75
13-80   Sand   SM, SP-SM   A-1-b, A-2-4,   0   0   80-100   75-100		6	sand						0	1	1
32-80   Sand   SM, SP-SM   A-1-b, A-2-4, 0   0   80-100   75-100		23-32	Sand					>	00T-08	00T-C/	0/-07
inha		32-80	Sand					0	80-100	75-100	20-70
11-23   Sand   SM   A-1-b, A-2-4   0   0   0   0   0   0   0   0   0		1	5					· 	9	1	)
11-23   Sand   SM   A-1-b, A-2-4   0   0   80-100   75-											
hga	74D:										
1-24   Loamy sand   SP-SM, SM   A-1-b, A-2-4,   0   0   80-100   75-100     4-11   Loamy sand   SM, SP-SM   A-1-b, A-2-4,   0   0   80-100   75-100     11-23   Sand   Sm, SP-SM   A-1-b, A-2-4,   0   0   80-100   75-100     23-32   Sand   SP-SM, SM   A-1-b, A-2-4,   0   0   80-100   75-100     32-80   Sand   SM, SP-SM   A-1-b, A-2-4,   0   0   80-100   75-100     32-80   Sand   SM   SP-SM   A-1-b, A-2-4,   0   0   80-100   75-100     12-25   Sand, loamy   SM   A-2, A-3   0   0   95-100   85-100     12-25   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     13-2   Sand   Sm   A-2, A-3   0   0   95-100   85-100     14-3   Sand   Sm   A-2, A-3   0   0   95-100   85-100     15-25   Sand, loamy   SM   A-2, A-3   0   0   95-100   85-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   Sand, coarse   SM   A-2, A-3   0   0   95-100     15-25   San	Vilas	0-2	Loamy	sand	SM		- —	0	80-100	75-100	30-75
4-11   Loamy sand   SM, SP-SM   A-1-b, A-2-4   0   0   80-100   75-100   80-100   75-100   80-100   75-100   80-100   75-100   80-100   75-100   80-100   75-100   80-100   75-100   80-100   75-100   80-100   75-100   80-100	_	2-4	Loamy	sand			_	0	80-100	75-100	30-75
1-23   Sand   SM   A-1-b, A-2-4   0   0   80-100   75-100     1-23   Sand   SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     23-32   Sand   SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     32-80   Sand   SM   SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     32-80   Sand   SM   SP-SM   A-1-b, A-2-4   0   0   80-100   75-100     4-3   A-3   A-3   0   0   95-100   85-100     5-25   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand   Sa						A-3			_		
11-23   Sand, loamy   SM, SP-SM   A-1-b, A-2-4,   0   0   80-100   75-100     23-32   Sand   SP-SM, SM   A-1-b, A-2-4,   0   0   80-100   75-100     32-80   Sand   SM, SP-SM   A-1-b, A-2-4,   0   0   80-100   75-100     4-3   A-3   A-3   A-3   A-3   A-1     5-80   Sand, loamy   SM   A-2, A-3   0   0   95-100   85-100     5-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand   Sand   Sm   A-2, A-3   0   0   95-100   85-100     1-2   Sand   Sand   Sm   A-2, A-3   0   0   95-100   85-100     5-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand   Sand   Sm   A-2, A-3   0   0   95-100   85-100     1-2   Sand   Sand   Sm   A-2, A-3   0   0   95-100   85-100     1-2   Sand   Sand   Sm   A-2, A-3   0   0   95-100   85-100     1-3   Sand   Sand   Sm   A-2, A-3   0   0   95-100   85-100     1-4   Sand   Sand   Sm   A-2, A-3   0   0   95-100     1-5   Sand   Sand   Sm   A-2, A-3   0   0   95-100     1-6   Sand   Sand   Sand   Sm   A-2, A-3   0   0   95-100     1-7   Sand   Sand   Sm   A-2, A-3   0   0   95-100     1-8   Sand   Sand   Sm   A-2, A-3   0   0   95-100     1-7   Sand   Sand   Sm   A-2, A-3   0   0   95-100     1-8   Sand   Sand   Sm   A-2, A-3   0   0   95-100     1-9   Sand   Sand   Sm   A-2, A-3   0   0   95-100     1-9   Sand   Sand   Sm   A-2, A-3   0   0   95-100     1-9   Sand   Sand   Sm   A-2, A-3   0   0   95-100     1-9   Sand   Sand   Sm   A-2, A-3   0   0   95-100     1-9   Sand   Sand   Sm   A-2, A-3   0   0   95-100     1-9   Sand   Sand   Sm   A-2, A-3   0   0   95-100     1-9   Sand   Sm   A-2, A-3   0   0   95-100     1-9   Sand   Sm   A-2, A-3   0   0   95-100     1-9   Sand   Sm   A-2, A-3   0   0   95-100     1-9   Sand   Sm   A-2, A-3   0   0   95-100     1-9   Sand   Sm   A-2, A-3   0   0   95-100     1-9   Sand   Sm   A-2, A-3   0   0   0   95-100     1-9   Sand   Sm   A-2, A-3   0   0   0   95-100     1-9   Sand   Sm   A-2, A-3   0   0   0   95-100     1-9   Sand   Sm   A-2, A-3   0   0   0   95-100     1-9   Sm   A-2, A-3   0   0   0   9		4-11	Loamy	sand			_	0	80-100	75-100	30-75
13-32   Sand   SP-SM, SM   A-1-b, A-2-4,   0   0   80-100   75-100		11-23	Sand,	loamy			_	0	80-100	75-100	
132-80   Sand   SP-SM, SM   A-1-b, A-2-4, 0   0   80-100   75-100     32-80   Sand   SM, SP-SM   A-1-b, A-2-4, 0   0   80-100   75-100     32-80   Sand, loamy   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand, loamy   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand, loamy   SM   A-2, A-3   0   0   95-100   85-100     1-2   Sand, loamy   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   0   95-100   85-100     25-80   Sand, coarse   SM   A-2, A-3   0   0   0   95-100   85-100     25-80   Sand, coarse   SM			sand								
hga		23-32	Sand					0	80-100	75-100	
hga		0							0	1	
hga  2-25 Sand, loamy SM A-2, A-3 0 0 95-100 85-100 some sand sand sand sand sand sand sand sand		32-80	Sand					o 	00T-08	00T-6/	
hga						- A - 3					
ahga	100B:										
2-25   Sand, loamy   SM   A-2, A-3   0   0   95-100   85-100     Sand   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100     Sand   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     Sand   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     Sand   Sand   Sand   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     Sand   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     Sand   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     Sand   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     Sand   Sand   Sand   SM   A-2, A-3   0   0   95-100   85-100     Sand   Sand   Sand   Sand   Sand   Sand   SM   SA-2, A-3   0   0   95-100   85-100     Sand   Sand   Sand   SM   SA-2, A-3   0   0   95-100   85-100     Sand   Sand   Sand   SM   SA-2, A-3   0   0   95-100   85-100     Sand   Sand   Sand   SM   SA-2, A-3   0   0   95-100   85-100     Sand   Sand   SM   SA-2, A-3   0   0   95-100   85-100     Sand   Sand   Sand   SM   SA-2, A-3   0   0   95-100   85-100     Sand   Sand   SA-2, A-3   0   0   95-100   85-100     Sand   Sand   SA-2, A-3   0   0   95-100   85-100     Sand   SA-2, A-3   0   0   95-100   85-100     Sand   SA-2, A-3   0   0   95-100   85-100     SA-2, A-3   0   0   0   95-100     SA-3, A-3   0   0   0   95-100     SA-4	Menahga	0-2	Sand		SM	A-	0	0	95-100	85-100	55-70
Sand   Sand	_	2-25	Sand,	loamy	SM	A-	0	0	95-100	85-100	55-75
25-80   Sand, coarse   SM   A-2, A-3   0   0   95-100   85-100	_		sand			_	_				
in the sand in the	_	25-80	Sand,	coarse	SM		o —	0	95-100	85-100	55-70
index in the stand in the stand is sand in the stand in t			sand								
hyga 0-1 Slightly   PT   A-8   0   0   10	1000:										
decomposed	Menahga	0-1	Slight	:1y	PT	A-8	0	0	100	100	
Plant material			decon	posed							
Sand   SM   A-2, A-3   0   0   95-100   85-100			plant	material		_	_				
Sand, loamy   SM   A-2, A-3   0   0   95-100   85-100	_	1-2	Sand		SM		0	0	95-100	85-100	
sand	_	2-25	Sand,	loamy	SM		0	0	95-100	85-100	
Sand   Coarse   SM   A-2, A-3   0   0   sand	_		sand			_	_	_	_		
eand	_	25-80	Sand,	coarse	SM		o —	0	95-100	85-100	55-70
	_		sand			_	_		_		

Table 23. -- Engineering Index Properties -- Continued

Map symbol	Depth	USDA texture	Classif	Classification	Fragn	Fragments	Per	Percentage pass sieve number-	pass
and	•				>10	3-10			
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	In				Pct	Pct			
100D:									
Menahga	0-1	Slightly	PT	A-8	0	0	100	100	:
		decomposed							
		plant material							
	1-2	Sand	SM	A-2, A-3	0	0	95-100	85-100	55-70
	2-25	Sand, loamy	SM	A-2, A-3	0	0	95-100 85-100 55-75	85-100	55-75
		sand			_		_		
	25-80	Sand, coarse	SM	A-2, A-3	0	0	95-100	95-100   85-100   55-70	55-70
		sand							
12/0:	•						- C		1
Amery	0-3	Sandy Loam		A-2-4, A-4	ر د - 0	/-0	86-6/ 00T-68	20-01	c/-0c
	3-22	Sandy loam,	SC-SM, SM	A-2-4, A-4	0-2	0-7	55-100  50-90	20-90	50-75
					_		_		
		loam, gravelly		_	_	_	_		
		sandy loam		_	_		_	_	
	22-34	Sandy loam,	SM, SC-SM	A-1-b, A-2-4,	0-5	0-7	55-100 50-90	20-90	35-75
		fine sandy		A-4			_		
		loam, gravelly			_		_		
		sandy loam			_		_		
	34-41	Gravelly sandy	SC-SM, SM	A-1-b, A-2-4,	0 - 5	0-7	55-100 50-90	20-90	35-75
		loam, fine		A-4	_		_		
		sandy loam,			_		_		
		sandy loam		_	_		_	_	
	41-57	Gravelly sandy	SC, SM	A-2-4, A-4,	0-2	0-7	55-100	20-90	35-75
		loam, fine		A-1-b	_		_		
		sandy loam,							
		sandy loam		_	_		_	_	
	57-71	Sandy loam,	SC, SM	A-2-4, A-4,	0-2	0-7	55-100 50-90	20-90	35-75
		fine sandy		A-1-b	_	_	_	_	
		loam, gravelly							
		sandy loam							
	71-80	Sandy loam,	SC-SM, SM	A-1-b, A-2-4,	0 - 5	0-7	55-100  50-90	20-90	35-75
		fine sandy		A-4	_	_	_	_	
		loam, gravelly							
		sandy loam							
		_			_				
		-							

Table 23. -- Engineering Index Properties -- Continued

			Classi	Classification		Fragn	Fragments	Per	Percentage pass	pass
Map symbol	Depth	USDA texture						U1	sieve number-	mber-
and						>10	3-10			
soil name			Unified	AASHTO	ITO	inches	inches inches	4	10	40
	п					Pct	Pct			
127D:										
Rosholt	0 - 4	Sandy loam	SM	A-2, A-4	4.	1-5	0-3	80-100	80-100   75-100   50-75	50-75
	4-10	Sandy loam,	SC-SM, SM	A-1, A-2, A-4	-2, A-4	0	0-3	55-100	55-100   50-100   35-75	35-75
	_	fine sandy		_					_	
	_	loam, gravelly		_					_	
	_	loamy sand		_						
	10-14	Sandy loam,	SM, SC-SM	A-1, A-2, A-4	.2, A-4	0	0-3	55-100	55-100   50-100   35-75	35-75
	_	fine sandy		_					_	
	_	loam, gravelly		_					_	
	_	loamy sand		_						
	14-28	Sandy loam,	SM, SC	A-1, A-2, A-4	.2, A-4	0	0-3	55-100	55-100   50-100   35-80	35-80
	_	fine sandy		_						
	_	loam, gravelly		_					_	
	_	loam		_					_	
	28-34	Gravelly loamy	SM, GP-GM,	A-1, A-2, A-3	.2, A-3	0	0-25	30-100	30-100   25-100   20-80	20-80
	_	sand, very	GM, SP-SM	_					_	
	_	gravelly		_					_	
	_	coarse sand,		_						
	_	sand		_				_		
	34-60	Stratified sand SP-SM, GP,	SP-SM, GP,	A-1, A-2, A-3	.2, A-3	0	0-25	30-100 25-95	25-95	15-65
	_	to very	GP-GM, SP	_						
	_	gravelly		_					_	
	_	coarse sand		_						
	_			_						

Table 23. -- Engineering Index Properties -- Continued

			Classif	Classification	Fragments	ents	Percei	Percentage pass	988
Map symbol	Depth	USDA texture					sie	sieve number-	er-
and	1				>10	3-10			
soil name			Uni fied	AASHTO	inches inches	inches	4	10	40
	In			_	Pct	Pct		_	
1									
Amery	0	Sandy loam	Mo - Co	A-2-4	ر ا	0-7	85-100 75-98		50-75
7		Samuely Form			) L	1 0	0 0		1 (
	3-22	Sandy Loam,   loam, gravelly	SC-SM, SM	A-2-4, A-4	c - 0	\ - 0	06-05 00T-55		50-75
		loam, gravelly						_	
		sandy loam						_	
	22-34	Sandy loam,	SM, SC-SM	A-1-b, A-2-4,	0-5	0-7	55-100 50-90	_	35-75
		fine sandy		A-4			_	_	
		loam, gravelly		_			_	_	
		sandy loam					_	_	
	34-41	Gravelly sandy	SC-SM, SM	A-1-b, A-2-4,	0-5	0-7	55-100   50-90	_	35-75
		loam, fine		A-4	_		_	_	
		sandy loam,		_	_	_	_	_	
		sandy loam			_		_	_	
	41-57	Gravelly sandy	SC, SM	A-2-4, A-4,	0 - 5	0-7	55-100   50-90	_	35-75
		loam, fine		A-1-b	_	_	_	_	
		sandy loam,		_	_	_	_	_	
		sandy loam		_	_	_	_	_	
	57-71	Sandy loam,	SC, SM	A-2-4, A-4,	0 - 5	0-7	55-100   50-90	_	35-75
		fine sandy		A-1-b			_	_	
		loam, gravelly		_			_	_	
		sandy loam		_			_	_	
	71-80	Sandy loam,	SC-SM, SM	A-1-b, A-2-4,	0 - 5	0-7	55-100   50-90	_	35-75
		fine sandy		A-4			_	_	
		loam, gravelly		_			_	_	
		sandy loam		_	_		_	_	
							_	_	

Table 23. -- Engineering Index Properties--Continued

Map gymbol	Depth	USDA texture	Classif	Classification		Fragments	ants	Per	Percentage pass	pass
and	4				^ 	>10	3-10	1		
soil name			Uni fied	AASHTO	in	Ø	inches	4	10	40
	ų.				<u>—</u> —	Pct	Pct			
127E:										
Rosholt	0 - 4		SM	A-4		1-5	0-3	80-100 75-100 50-75	75-100	50-75
	4-10		SM, SC-SM	A-1, A-2,	A-4	 o	0-3	55-100	20-100	35-75
		line sandy								
								_		
	10-14		SM, SC-SM	A-1, A-2,	A-4	0	0-3	55-100   50-100	50-100	35-75
		fine sandy			_	_		_		
		loam, gravelly				_				
				_	_	_		_		
	14-28	Sandy loam,	SC, SM	A-1, A-2,	A-4	0	0-3	55-100   50-100	50-100	35-80
		fine sandy		_	_	_	_		_	
		loam, gravelly			_	_	_			
		loam			_					
-	28-34			A-1, A-2,	A-3	0	0-25	30-100 25-100	25-100	20-80
-		sand, very	GP-GM, GM		_					
		gravelly								
		coarse sand,				_				
_		sand			_					
	34-60	Stratified sand	SP-SM, GP,	A-1, A-2,	A-3	0	0-25	30-100	25-95	15-65
		to very	GP-GM, SP	_	_	_	_	_	_	
_		gravelly		_	_	_		_	_	
		coarse sand			_	_				
156B:					_,_					
Magnor, very						_		_		
	0 - 4	Silt loam	CL-ML, CL, ML A-4	A-4	_	-2	0-5	90-100 85-100 80-10	85-100	80-10
	4-11	Silt loam	CL, ML, CL-ML A-4	A-4	_	-2	0-5	90-100 85-100 80-10	85-100	80-10
_	11-16	Silt loam	CL-ML, CL, ML A-4	A-4	<u> </u>	-2	0-5	90-100  85-100  80-10	85-100	80-10
	16-21	Silt loam	CL-ML,	ML   A-4	о —	0-2	0-5	90-100  85-100  80-10	85-100	80-10
	21-39	Sandy loam,	SC, SM,	A-1, A-2,	A-4 0	- 5	0-7	55-100   50-90	20-90	30-80
			SC-SM,							
			CL, ML,							
		sandy Loam,	CL-ML							
	0 0	Tino andi	TV. TV.	K	- 4		- 1	7	0	0 0 0
	י י י	loam sandy		4						
			oc, an							
	58-60	Fine sandy	SM, SC-SM	A-1, A-2	_	0-5	0-7	55-100 50-90	20-90	30-60
_		loam, sandy			_	_		_		
								_		
_		TO TO				_				
_					_					
-		_		_	-	-	-	=	-	

Table 23. -- Engineering Index Properties -- Continued

Lodmys ceM		4 40211	Classification	ication		Fragn	Fragments	Per	Percentage pass	pass
and	1 1 1 1			_		>10	3-10	1		
soil name			Unified	AASHTO	нто	inches	inches inches	4	10	40
	п					Pct	Pct			
156B:										
Magnor	8-0	Silt loam	CL-ML, ML, CL A-4	A-4		0-2	0-5	90-100 85-100 80-10	85-100	80-10
	8-11	Silt loam	CL, ML, CL-ML A-4	A-4		0-2	0-5	90-100 85-100 80-10	85-100	80-10
_	11-16	Silt loam	CL, CL-ML, ML A-4	A-4		0-2	0 - 5	90-100 85-100 80-10	85-100	80-10
_	16-21	Silt loam	ML, CL, CL-ML A-4	A-4		0-2	0 - 5	90-100	90-100  85-100  80-10	80-10
_	21-39	Sandy loam,	SM, CL-ML,	A-1, A	A-2, A-4	0 - 5	0-7	55-100 50-90	_	30-80
_		fine sandy	SC, ML, CL,	_					_	
_	_	loam, gravelly	SC-SM	_				_	_	
	_	sandy loam,							_	
		loam								
_	39-58	Fine sandy	ML, CL, SC,	A-1, A	A-1, A-2, A-4	0-5	0-7	55-100 50-90	_	30-80
	_	loam, sandy	SM, CL-ML,	_				_	_	
	_	loam, gravelly	SC-SM	_				_	_	
_	_	sandy loam,		_				_	_	
_	_	loam		_				_	_	
_	28-60	Fine sandy	SC-SM, SM	A-1, A-2	-2	0 - 5	0-7	55-100 50-90	_	30-60
_		loam, sandy		_					_	
		loam, gravelly								
						_		_		
		loam						_		
157B:										
Freeon, very	_								_	
stony	0 - 4	Silt loam		CL A-4		0-2	0-2	90-100	90-100   85-100   80-10	80-10
_	4-19	Silt loam	ML, CL-ML, CL	CL A-4		0-2	0-5	90-100	90-100 85-100 80-10	80-10
	19-39	Sandy loam,	CL-ML, SC,	A-1, A	A-2, A-4	0-5	0-7	60-100 50-90	_	30-90
_		gravelly loam	SC-SM, CL,	_		_		_		
_			ML, SM	_						
_	39-53	Sandy loam,	SM, SC-SM,	A-1, A	A-2, A-4	0 - 2	0-7	60-100 50-90	20-90	30-90
_		gravelly loam,	Cr, sc,	_					_	
_	_	fine sandy	CL-ML, ML	_				_	_	
_	_	loam		_				_	_	
	53-80	Sandy loam,	SM, SC-SM	A-1, A-2	-2	0-5	0-7	60-100 50-90	_	30-90
		gravelly fine								
		sandy loam								
		. —		_		_		_	_	

Table 23.--Engineering Index Properties--Continued

Mars dew	Denth	USDA texture	Classification	cation		Fragments	nts	Per	Percentage pass	pass mber-
	1 1 1				-	>10	3-10	i		
soil name			Unified	AASHTO	inc	inches inches	nches	4	10	40
	п П					Pct	Pct			
157B:										
Freeon	0 - 4	Silt loam	CL-ML, ML	A-4		0-2	0-7			80-10
	4-19	Silt loam	CL, CL-ML			_	0-5			80-IO
	19-39	Sandy loam,		A-1, A-2, P	A-4 0-	_	0-7	60-100	20-90	30-90
		gravelly loam								
			SC-SM, SM	•						
	39-53	Sandy loam,		A-1, A-2, P	A-4 0-		0-7	60-100   50-90	20-90	30-90
		gravelly loam,	ML, SC,			_				
		fine sandy	SC-SM, SM							
		Loam	-							
	53-80	Sandy loam,	SC-SM, SM	A-1, A-2		0-5	0-7	001-09	50-90	30-90
		sandy loam			- — -					
157C:										
Freeon, very						_	_	_		
	0 - 4	Silt loam	CL-ML, ML, CL	CL A-4	0	0-2	0-5	90-100 85-100	85-100	80-10
	4-19	Silt loam	CL-ML, ML, CL	CL A-4	-0	_	0-5	90-100 85-100 80-10	85-100	80-10
	19-39	Sandy loam,		A-1, A-2, P	A-4 0-	_	0-7	60-100	20-90	30-90
		gravelly loam	SC, SC-SM,		_		-		-	
			SM, CL		_					
	39-53	Sandy loam,	L-ML,	A-1, A-2, P	A-4 0-		0-7	60-100   50-90	_	30-90
		gravelly loam,	SC-SM, SM,		_	_	_	_	_	
		fine sandy	ML, SC		_	_	_	_	_	
		loam	_		_	_	_	_	_	
	53-80	Sandy loam,	SM, SC-SM	A-1, A-2	-0	0-5 (	0-7	001-09	20-90	30-90
		gravelly fine	_		_	_	_	_	_	
		sandy loam								
Freeon	0 - 4	Silt loam	CL, CL-ML, ML A-4	A-4		0-2	0-7	90-100	85-100 80-10	80-10
	4-19	Silt loam	CL, ML, CL-ML A-4	A-4	-0	0-2	0-5	90-100 85-100 80-10	85-100	80-10
	19-39	Sandy loam,	ML, CL-ML,	A-1, A-2, P	A-4 0-	_	0-7	60-100	20-90	30-90
		gravelly loam	CL, SM, SC, SC-SM							
	39-53	Sandy loam,	MI, SM,	A-1, A-2, 2	A-4 0-		0-7	60-100   50-90	20-90	30-90
	} } - —	gravelly loam,	CL-ML, CL,	ì						)
		fine sandy			-		_	-	_	
		loam			_	-	_		_	
	53-80	Sandy loam,	SC-SM, SM	A-1, A-2	0	0-5	0-7	60-100   50-90		30-90
		gravelly fine			_	_	_			
		sandy loam			_	_				
					_	_	_	-	_	
-	_	_	=		-	-	-	-	-	

Table 23. -- Engineering Index Properties -- Continued

sand GP, SR, SR, SR, SR, SR, SR, SR, SR, SR, SR	Unified						000000000000000000000000000000000000000
In name	Unified		7	3-10	σ. 	sieve number-	mber-
erle 0-7 Sandy loam    7-11 Sandy loam, gravelly   fine sandy   loam, gravelly   fine sandy   loam, gravelly   loam   gravelly   loam   gravelly   loam   gravelly   loam   gravelly   loam   lo		AASHTO	inches inches	inches	4	10	40
erle 0-7 Sandy loam 7-11 Sandy loam, 10am, gravelly fine sandy 11-31 Sandy loam, fine sandy 10am 31-60 Stratified sand to very gravelly coarse sand 12-3 Sandy loam, fine sandy 10am 3-19 Sandy loam, 10am, loam 3-19 Sandy loam, 10am, fine sandy loam, 10am, loam 19-26 Sandy loam, 19-26 Sandy loam, 19-26 Sandy loam,			Pct	Pct			
### Sandy loam   7-11   Sandy loam     10am gravelly     11-31   Sandy loam     11-31   Sandy loam     11-31   Sandy loam     11-31   Sandy loam     11-32   Sandy loam     2-3   Sandy loam     2-3   Sandy loam     3-19   Sandy loam     19-26				•	1		i
7-11   Sandy loam, gravelly	SM, SC-SM	A-2, A-4	0	6 - O	85-100	85-100 80-100 55-80	55-80
loam, gravelly   fine sandy   loam	SC	A-2, A-4	0	6-0	75-100	75-100 70-100 50-80	50-80
fine sandy			_		_	_	
11-31   Sandy loam,   gravelly loam,   fine sandy   loam   loam   loam   loam   loam   loam   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   loam							
11-31   Sandy loam,   gravelly loam,   fine sandy   loam   loam   loam   gravelly loam,   gravelly   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   loam   loam,   loam   loam,   loa			_				
gravelly loam, fine sandy   loam	SM	A-1, A-2, A-4	0	6-0	55-100	50-100	35-75
fine sandy   10am   10am   10am   10am   10am   10am   10am   19-26   Sandy loam   19-26							
31-60   Stratified sand   to very   gravelly   gravelly   coarse sand   coarse sand   coarse sand   oarse   coarse							
31-60   Stratified sand   to very   gravelly   gravelly   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse   coarse sand   coarse   coa							
to very   gravelly   gravelly   gravelly   gravelly   coarse sand	SP-SM,	A-1, A-2, A-3	0	6-0	30-100 25-95	25-95	15-65
gravelly   coarse sand   coarse sand	P, GP-GM						
coarse sand							
			_			_	
2-3   Sandy loam   2-3   Sandy loam,							
2-3   Sandy loam,   fine sandy   loam, loam   3-19   Sandy loam,   loam, fine   sandy loam   19-26   Sandy loam,   gravelly loam,		A-1-b. A-2.	0	0-7	80-100	80-100 75-100 30-90	30-90
Sandy loam, fine sandy loam, loam Sandy loam, loam, fine sandy loam Sandy loam Sandy loam Gravelly loam,	_	A-4			) 	9	
fine sandy loam, loam Sandy loam, loam, fine sandy loam Sandy loam Gravelly loam,	SC-SM	A-1-b, A-2,	0	0-7	80-100	80-100 75-100	30-90
loam, loam   Sandy loam,   loam, fine   sandy loam   Sandy loam,   gravelly loam,	_	A-4	_				
Sandy loam,   loam, fine   sandy loam   Sandy loam,   gravelly loam,			_		_		
loam, fine sandy loam Sandy loam, gravelly loam,	SC-SM,	SM A-1-b, A-2,	0	0-7	80-100	80-100 75-100 30-90	30-90
Sandy loam Sandy loam, gravelly loam,		A-4	_		_	_	
Sandy loam,   gravelly loam,			_		_	_	
gravelly loam,	SC-SM, SC, SM	SM A-1, A-2, A-4	0	0-7	25-100	55-100 50-100 30-90	30-90
			_		_	_	
fine sandy							
loam			_			_	
Ω	_	A-1, A-2, A-4	0	0-7	55-100	55-100   50-100   30-90	30-90
gravelly loam, CL	CL-ML, SC		_		_	_	
fine sandy			_		_	_	
loam			_		_	_	
38-60  Stratified sand GP-0	sand   GP-GM, SP-SM,   A-1, A-2,	A-1, A-2, A-3	0	0-15	45-100 40-95	40-95	15-65
to very SP,	IP, GP		_			_	
gravelly			_		_	_	
coarse sand			_		_	_	

Table 23. -- Engineering Index Properties -- Continued

Map symbol Depth   USDA texture   Inches   Inche				Classif	Classification	Fragm	Fragments	Per	Percentage pass	pass
and  il name  In  In  In  In  In  In  In  In  In  I	Map symbol	Depth	USDA texture					U1	sieve number-	mber-
In name	and					>10	3-10			
In	soil name			Unified	AASHTO	inches	inches	4	10	40
2-3   Sandy loam   SM   A-1-b, A-2,   0   0-7     2-3   Sandy loam,   SC-SM, SM   A-1-b, A-2,   0   0-7     10am, loam   SC, SC-SM, SM   A-1-b, A-2,   0   0-7     10am, fine   Sandy loam,   SC, SC-SM, SM   A-1-b, A-2,   0   0-7     19-26   Sandy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     19-26   Sandy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     19-26   Sandy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     19-26   Sandy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     19-26   Sandy loam,   SC, SM   A-1, A-2, A-4   0   0-7     10am   SC, SM   Fine sandy   SC, SM		ų.				Pct	Pct			
2-3   Sandy loam   SM   A-1-b, A-2,   0   0-7     2-3   Sandy loam,   SC-SM, SM   A-1-b, A-2,   0   0-7     1	182C:									
Sandy loam,         SC-SM, SM         A-4         A-4           fine sandy         A-1-b, A-2, 0 0 0-7           loam, loam         SC, SC-SM, SM A-1-b, A-2, 0 0-7           loam, fine         A-4         0 0-7           sandy loam         SM, SC-SW, SC A-1, A-2, A-4 0 0-7           gravelly loam, fine sandy         CL-ML, SC-SM, A-1, A-2, A-4 0 0-7           gravelly loam, SC, SM fine sandy         SC, SM A-1, A-2, A-4 0 0-7           gravelly loam, SC, SM fine sandy         SC, SM SC-SW, SP A-1, A-2, A-3 0 0-15           to very         SP-SM, SP           gravelly         Coarse sand	Padus	0-2	Sandy loam	SM	A-1-b, A-2,	0	0-7	80-100	80-100   75-100   30-90	30-90
Sandy loam,   SC-SM, SM   A-1-b, A-2,   0   0-7     Line sandy   A-4   A-4     Loam, loam   A-4   0   0-7     Sandy loam,   SC, SC-SM, SM   A-1-b, A-2,   0   0-7     Loam, fine   A-4   A-4     Sandy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     Gravelly loam,   CL-ML, SC-SM,   A-1, A-2, A-4   0   0-7     Gravelly loam,   SC, SM   A-1, A-2, A-4   0   0-7     Gravelly loam,   SC, SM   A-1, A-2, A-4   0   0-7     Gravelly loam,   SC, SM   SC-SM,   A-1, A-2, A-4   0   0-7     Gravelly   SP-SM, SP   A-1, A-2, A-3   0   0-15     Gravelly   SP-SM, SP   A-1, A-2, A-3   0   0-15     Gravelly   Coarse sand     Coarse   Coa	_				A-4	_	_		_	
fine sandy   A-4     loam, loam   SC, SC-SM, SM   A-1-b, A-2,   0   0-7     loam, fine   A-4     sandy loam   A-4     sandy loam   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     gravelly loam,   CL-ML, SC-SM,   A-1, A-2, A-4   0   0-7     gravelly loam,   CL-ML, SC-SM,   A-1, A-2, A-4   0   0-7     gravelly loam,   SC, SM   A-1, A-2, A-4   0   0-7     fine sandy   SC, SM   Fine sandy   CL-ML, SC-SM,   A-1, A-2, A-3   0     stratified sand   GP-GM, GP,   A-1, A-2, A-3   0     coarse sand   CC-ML, SP-SM, SP   CC-ML, SP-SM, SP     coarse sand   CC-ML, SP-SM, SP     coarse sand   CC-ML, SP-SM, SP     coarse sand   CC-ML, SP-SM, SP     coarse sand   CC-ML, SP-SM, SP     coarse sand   CC-ML, SP-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SP-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SP     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-SM, SM     coarse sand   CC-ML, SC-ML, SC-ML, SM     coarse sand   CC-ML, SC-ML, SC-ML, SM     coarse sand   CC-ML, SC-ML, S		2-3	Sandy loam,		A-1-b, A-2,	0	0-7	80-100	80-100   75-100   30-90	30-90
Loam, loam   Sandy loam,   SC, SC-SM, SM   A-1-b, A-2,   0   0-7     Loam, fine   A-4   A-4     sandy loam   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     gravelly loam,   CL-ML, SC-SM,   A-1, A-2, A-4   0   0-7     fine sandy   Sandy loam,   CL-ML, SC-SM,   A-1, A-2, A-4   0   0-7     gravelly loam,   SC, SM   Fine sandy   SC, SM   Fine sandy   CL-ML, SC-SM,   A-1, A-2, A-3   C   C-15     coarse sand   GP-GM, GP,   A-1, A-2, A-3   C   C-15     coarse sand   C-15   C-15     coarse sand   C-15   C-15     coarse sand   C-15   C-15     coarse sand   C-15   C-15     coarse sand   C-15   C-15     coarse sand   C-15   C-15     coarse sand   C-15   C-15     coarse sand   C-15   C-15     coarse sand   C-15   C-15     coarse sand   C-15   C-15     coarse sand   C-15   C-15     coarse sand   C-15   C-15     coarse sand   C-15   C-15     coarse sand   C-15   C-15     coarse   C-15   C-15     co	_		fine sandy		A-4	_	_		_	
Sandy loam,   SC, SC-SM, SM   A-1-b, A-2,   0   0-7     sandy loam   A-4   0   0-7     Sandy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     fine sandy   Sm   CL-ML, SC-SM, A-1, A-2, A-4   0   0-7     fine sandy   SC, SM   A-1, A-2, A-4   0   0-7     sandy loam,   SC, SM   A-1, A-2, A-4   0   0-7     fine sandy   SC, SM   CL-ML, SC-SM, A-1, A-2, A-4   0   0-15     fine sandy   SC, SM   CL-ML, SC-SM, A-1, A-2, A-3   0   0-15     carselly   SP-SM, SP   A-1, A-2, A-3   0   0-15     coarse sand   CC-SM, SP   CC-SM, SP-SM, SP   CC-SM, SP	_		loam, loam		_		_		_	
Loam, fine   A-4   Sandy loam   SM, SC-SM, SC   A-1, A-2, A-4   O   O-7	_	3-19	Sandy loam,	SC, SC-SM, SM	A-1-b, A-2,	0	0-7	80-100	80-100   75-100   30-90	30-90
Sandy loam   Sam, SC-SM, SC   A-1, A-2, A-4   0   0-7     gravelly loam,   Sm, SC-SM, SC   A-1, A-2, A-4   0   0-7     fine sandy   CL-ML, SC-SM,   A-1, A-2, A-4   0   0-7     gravelly loam,   SC, SM                               fine sandy   Sc, SM                             to wery   SP-SM, SP                               coarse sand   Gravelly                                     coarse sand	_		loam, fine		A-4		_		_	
Sandy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     gravelly loam,	_		sandy loam		_		_		_	
gravelly loam,	_	19-26	Sandy loam,	SM, SC-SM, SC	A-1, A-2, A-4	_	0-7	55-100	55-100   50-100   30-90	30-90
fine sandy	_		gravelly loam,		_		_		_	
Sandy loam,   CL-ML, SC-SM,   A-1, A-2, A-4   0   0-7     gravelly loam,   SC, SM	_		fine sandy			_	_		_	
Sandy loam,   CL-ML, SC-SM,   A-1, A-2, A-4   0   0-7     gravelly loam,   SC, SM	_		loam			_	_		_	
gravelly loam, SC, SM   fine sandy   St. SM	_	26-38	Sandy loam,	CL-ML, SC-SM,	A-1, A-2, A-4	_	0-7	55-100	55-100   50-100   30-90	30-90
fine sandy	_		gravelly loam,	SC, SM	_		_		_	
loam	_		fine sandy		_		_		_	
Stratified sand   GP-GM, GP,   A-1, A-2, A-3   0   0-15     to very   SP-SM, SP       gravelly     coarse sand	_		loam							
and —		38-60	Stratified sand	GP-GM, GP,	A-1, A-2, A-3	_		45-100	40-95	15-65
gravelly	_		to very	SP-SM, SP	_		_		_	
coarse sand	_		gravelly		_		_		_	
	_		coarse sand			_	_		_	
	_					_				

Table 23. -- Engineering Index Properties -- Continued

Map symbol	Depth	USDA texture	Classification	cation	Fragments	nents	Pe	Percentage pass	pass
and	1 1 1				>10	3-10	1		
soil name			Unified	AASHTO	inches		4	10	40
	H				Pct	Pct			
192A:	c	, , , , , , , , , , , , , , , , , , ,	20			7	5	, , , , , , , , , , , , , , , , , , ,	7
	2 0 0	Sandy loam,	SM, SC-SM	A-1-b, A-2-4,	0	0-7	55-100 50-100 35-95	50-100	35-95
_		loam. gravelly							
	3-6	Sandy loam,	SM, SC-SM, SC	SC A-1-b, A-2-4,	0	0-7	55-100 50-100	50-100	35-95
				A-4			_		
		U2							
-									
_	6-16	Sandy loam.	SC. SC-SM. SM	SM A-1-b. A-2-4.	0	0-7	55-100 50-100	50-100	35-95
_	) 				,				)
				•					
	16-20	Sandy loam.	SC. CL-ML.	A-1-b. A-2-4.	0	0-7	55-100 50-100	50-100	35-95
		loamy sand,							
	20-32	Sandy loam,	SM, SC,	A-1-b, A-2-4,	0	0-7	55-100 50-100 35-95	50-100	35-95
		fine sandy	SC-SM, CL-M						
		loam, gravelly							
_	32-39	Gravelly loamy	GM, SM	A-1-a, A-2-4,	0	0-7	45-100 40-95	40-95	20-70
		sand, very		A-3					
-		gravelly							
		coarse sand							
-	39-60	Stratified sand	sand SP-SM, SP,	A-1, A-2, A-3	0	0-7	45-100	40-95	15-65
		to very	GP-GM, GP				_		
		gravelly							
		coarse sand					_	_	
		_			_		_	_	
193A:		_			_		_	_	
Minocqua	0 - 4			A-8	0	0	100	100	100
	4-15	oam,	ML, CL, SC,	A-2, A-4	0	0-7	80-100 75-100	75-100	45-10
			SM						
		sandy loam,							
		very tine							
	1			•		,	-	-	
	15-28	Loam, gravelly	ML, SC, CL,	A-1, A-2, A-4	0	0-7	55-100 50-100	20-100	30-95
		sandy loam,	SM						
		fine sandy							
	28-60	ed		A-1, A-2, A-3	0	0-7	45-100 40-95	40-95	15-65
		to very	GP-GM, SP-SM						
		gravelly							
		coarse sand							
_		_			_		_	_	

Table 23. -- Engineering Index Properties -- Continued

10   3-	Lodens rew	1 4	4 &CPT	Classification	ication	Fragments	ents	Per	Percentage pass	pass
11   10   10   10   10   10   10   10		1 2 1				>10	3-10		)	
Second Sendy loam	soil name			Unified	AASHTO	inches	inches	4	10	40
Sandy loam, SM, SC-SM   A-24, A-4   0   0-15   80-100   75-100		H				Pct	Pct			
1-5-21   3-86   3-104   1-3	215B:									
1-60   1-60	Pence	0-3	Sandy loam			0	0-15	80-100	75-100	50-85
Sandy loam, sand   Sc.SM, SM   A-1-b, A-2-4,   0   0-15   55-100   50-100		3-8	$\vdash$			0	0-15	80-100	75-100	45-95
8-15   Gravelly sandy   SC-SM, SM   A-1-b, A-2-4,   0   0-15   55-100   50-100				_						
8-15   Gravally sandy   SC-SM, SM   A-1-b, A-2-4,   0   0-15   55-100   50-100   10-am, sandy   10-am, sandy   10-am, sandy   10-am, loamy   10-am, sandy				_						
10-am, loa		21.1	Gravelly gandy		A-1-b A-2-4	c	0-15	55-100	50-100	30-95
15-21   Gravelly coarse   SP-SM, GP-GM, A-1-b, A-3   0   0-15   45-10   40-95     sand, loamy   SM, GM     sand,		i i	loam gandy		A = 4	 -	) H	1		
15-21   Gravelly coars   FP-SM, GP-GM, A-1-b, A-3   0   0-15   45-100   40-95					· •					
15-21   Gravelly coarse   SP-SM, GP-GM, A-1-b, A-3   0   0-15   45-100   40-95			Ω							
15-21   Gravelly coarse   SP-SM, GP-GM, A-1-b, A-3   0   0-15   45-100   40-95			loam							
Sand, loamy   SM, GM   Sand,		15-21	Gravelly coarse	SP-SM, GP-GM,	A-1-b, A-3	0	0-15	45-100	40-95	20-70
Sand, sand,   Sand   SP-SM, GP,   A-1, A-2, A-3   0   0-15   45-100   40-95						_		_	_	
loamy fine   5-100   40-95   10-0 very   GP-GM, GP-GM   A-1, A-2, A-3   0   0-15   45-100   40-95   10-0 very   GP-GM, GP-GM   A-1, A-2, A-3   0   0-15   45-100   40-95   10-0 very   GP-GM, GP-GM   A-1, A-2, A-3   0   0-15   45-100   40-95   10-0 very   GP-GM, GP-GM   A-1, A-2, A-3   0   0-15   45-100   40-95   10-0 very   GP-GM, GP-GM   A-1, A-2, A-3   0   0-15   45-100   40-95   10-0 very   GP-GM, GP-GM   A-1, A-2, A-3   0   0-15   45-100   40-95   10-0 very   GP-GM, GP-GM   A-1, A-2, A-3   0   0-15   45-100   40-95   10-0 very   GP-GM, GP-GM   A-1, A-2, A-3   0   0-15   45-100   40-95   10-0 very   GP-GM, GP-GM   A-1, A-2, A-3   0   0-15   45-100   40-95   10-0 very   10-0	_			_		_		_	_	
Sandy loam,   Sap. GP-GM, GP,   A-1, A-2, A-3   0   0-15   45-100   40-95     Lo very   SP, GP-GM	_			_		_		_	_	
1-60   Stratified sand   SP-SM, GP, GM   A-1, A-2, A-3   0   0-15   45-100   40-95			sand	_		_		_	_	
coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse sand   coarse   coarse sand   coarse		21-60		SP-SM, GP,	A-1, A-2, A-3	_	0-15	45-100	40-95	15-65
e	_		to very	SP, GP-GM		_		_	_	
Coarse sand   Coarse sand			gravelly	_		_		_	_	
3-8   Sandy loam   SM   A-4   0   0-15   80-100   75-100     3-8   Sandy loam, fine   Sm, SC-SM   A-2-4, A-4   0   0-15   80-100   75-100     10-am, fine   Sandy loam,   SM, SC-SM, SM   A-1-b, A-2-4,   0   0-15   55-100   50-100     8-15   Gravelly sandy   SC-SM, SM   A-1-b, A-2-4,   0   0-15   55-100   50-100     10-am, loam, loam,   A-4     A-1-b, A-3   0   0-15   45-100   40-95     15-21   Gravelly coarse   GM, SM,   A-1-b, A-3   0   0-15   45-100   40-95     15-21   Gravelly coarse   GM, SM,   B-GM   A-1, A-2, A-3   0   0-15   45-100   40-95     21-60   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     15-21   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-22   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-25   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-26   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     15-27   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-28   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GRAV, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GRAV, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GRAV, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GRAV, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GRAV, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GRAV, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GRAV, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GRAV, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GRAV, GP   A-1, A-2,			coarse sand			_			_	
3-8   Sandy loam, fine   A-4   0   0-15   80-100   75-100     3-8   Sandy loam, fine   SM, SC-SM   A-2-4, A-4   0   0-15   80-100   75-100     10am, fine   Sandy loam,   A-4   0   0-15   80-100   75-100     10am, sandy   SC-SM, SM   A-1-b, A-2-4,   0   0-15   55-100   50-100     15-21   Gravelly sandy   SP-SM, GP-GM   A-1-b, A-3   0   0-15   45-100   40-95     15-21   Gravelly coarse   GM, SM,   A-1-b, A-3   0   0-15   45-100   40-95     15-22   Gravelly coarse   GM, SM,   A-1-b, A-3   0   0-15   45-100   40-95     15-24   Sand, loamy   SP-SM, GP-GM   A-1, A-2, A-3   0   0-15   45-100   40-95     15-25   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-26   Stratified sand   SP-SM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-26   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-27   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-28   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   Gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GP-GM, GP   A-1, A-2, A-3   0   0-15   45-100   40-95     15-29   GP-GM,	215C:			_						
3-8   Sandy loam, fine   SM, SC-SM   A-2-4, A-4   0   0-15   80-100   75-100     loam, fine   sandy loam,   loam, sandy   SC-SM, SM   A-1-b, A-2-4,   0   0-15   55-100   50-100     loam, sandy   SC-SM, SM   A-1-b, A-2   0   0-15   55-100   50-100     loam, loam,   A-4     A-1-b, A-3   0   0-15   45-100   40-95     sand, loamy fine   sand, sand,   loamy fine   sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loamy fine   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loam fine   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loam fine   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     loam fine   S	Pence	0-3	Sandy loam	SM	A-4	0	0-15	80-100	75-100	50-85
loam, fine   sandy   loam,   loamy sand		3-8	Sandy loam,		4,	0	0-15	80-100	75-100	45-95
Sandy loam,				_		_		_	_	
Commy sand   SC-SM, SM   A-1-b, A-2-4,   0   0-15     Loam, sandy   SC-SM, SM   A-4     0   0-15     Loam, loam, fine sandy   SP-SM, GP-GM   A-1-b, A-3   0   0-15     sand, loamy fine   SP-SM, SP,   A-1, A-2, A-3   0   0-15     coarse sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15     coarse sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-15     coarse sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-15     coarse sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-15     coarse sand   SP-GM, GP   A-1, A-2, A-3   0	_			_		_		_	_	
Gravelly sandy   SC-SM, SM   A-1-b, A-2-4,   0   0-15     loam, sandy     A-4     A-4     loam, loam,   A-4             fine sandy                   Gravelly coarse   GM, SM,   A-1-b, A-3   0   0-15     sand, loamy   SP-SM, GP-GM               sand, sand,                       sand                               sand                               sand                                     stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15     gravelly                                   coarse sand			loamy sand	_		_		_	_	
loam, sandy		8-15	Gravelly sandy			0	0-15	25-100	20-100	30-95
loam, loam, fine sandy					A-4					
fine sandy loam  Gravelly  Sand, loamy SP-SM, GP-GM  loamy fine  Stratified sand SP-SM, SP, A-1, A-2, A-3 0 0-15 45-100 40-95  sud Stratified sand SP-SM, SP, A-1, A-2, A-3 0 0-15 45-100 40-95  gravelly  coarse sand										
Gravelly coarse   GM, SM,   A-1-b, A-3   0   0-15   45-100   40-95     sand, loamy fine   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95     gravelly   GP-GM, GP-GM, GP   GP-GM, GP   GP-GM, GP-GM, GP   GP-GM, GP-GM, GP-GM, GP-GM, GP-GM,			fine sandy							
Sand,   SP-SM, GP-GM   SP-SM, GP-GM   SP-SM, GP-GM   Sand,   SP-SM, GP-GM   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95   Gravelly   Sp-GM, GP   Sp-SM, GP		15_21					Г	45.100	40.04	20-70
sand, loamy     SF-SM, GF-GM       sand, sand,     SP-SM, GP-GM       loamy fine       A-1, A-2, A-3   0   0-15   45-100   40-95   45-100   40-95   45-100   40-95   45-100   40-95   45-100   40-95   45-100   40-95   45-100   40-95   45-100   40-95   45-100   40-95   45-100   40-95   45-100   40-95   4		1 1 1		, H.		 >	1			0 / 0
Loamy fine										
Loamy rine				_						
Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-15   45-100   40-95   to very   GP-GM, GP				_						
coarse sand		21					7		0	15 65
and   GF-GM,		7T-90			A-1, A-2, A-3	 -	0-T2	42-T00	40 - 40 - 40 - 40 - 40 - 40 - 40 - 40 -	T2-67
gravellY coarse sand			בים יים יים יים יים יים יים יים יים יים							
COALGE GAIIG			gravelly							
			coarse sand							

Table 23. -- Engineering Index Properties -- Continued

15   10   10   10   10   10   10   10	Man avmbol	Depth	USDA texture	Classification	cation	Fragments	ents	Per	Percentage pass	pass
11   12   12   13   14   15   15   15   15   15   15   15	and	1 1 1				>10	3-10			
1.   2.   2.   2.   2.   2.   2.   2.	soil name			Unified	AASHTO	inches	inches	4	10	40
Sandy loam, Sine   Sic.SM, SM   A-2-4, A-4   0   0-15   80-100   75-100		п				Pct	Pct			
3-8   Sandy loam,   SC-SM, SM   A-2-4, A-4   0   0-15   80-100   75-100	ZISD: Pence	0-3	Sandv loam		A-4	0	0-15	80-100	75-100	50-85
Sandy loamy sand   Sc.SM, SM   A-1-b, A-2-4,   0   0-15   55-100   50-100		3-8	Sandy loam,		-4,	0	0-15	80-100	75-100	45-95
10-amy sand										
8-15   Gravelly sandy   SC-SM, SM   A-1-b, A-2-4,   0   0-15   55-100   50-100										
10am, sandy		8-15	Gravelly sandy		A-1-b, A-2-4,	0	0-15	55-100	50-100	30-95
15-21   Gravelly   A-1-b, A-3   0   0-15   45-100   40-95     15-21   Gravelly coarse   SP-SW, SM,   A-1-b, A-3   0   0-15   45-100   40-95     15-21   Gravelly coarse   SP-SW, SM,   A-1-b, A-3   0   0-15   45-100   40-95     10-32   Stratified and   GP, GP-GM,   A-1, A-2, A-3   0   0-15   45-100   40-95     10-32   Silt loam   CL-ML, CL   A-4, A-6   0   0-7   95-100   90-100     10-32   Silt loam   CL-ML,   A-4, A-6   0   0-7   95-100   90-100     10-32   Silt loam   CL-ML,   A-4, A-6   0   0-7   95-100   90-100     10-32   Silt loam   SP-SM, GM,   A-1, A-2,   0   0-7   95-100   45-100     10-32   Silt loam   SP-SM, GM,   A-1, A-2,   0   0-7   30-100   25-100     10-32   Silt loam   SM, GP-GM   A-1, A-3   0   0-7   45-100   40-95     10-32   Silt loam   SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   Silt loam   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   Sand, loamy   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-32   SP-SM, GP-GM   A-1	_		loam, sandy		A-4			_	_	
15-21   Gravelly coarse   SP-SM, SM,   A-1-b, A-3   0   0-15   45-100   40-95     sand, loamy fine   sand, loamy fine   sand, loamy fine   sand, loamy fine   sand, loamy fine   sand, loamy fine   sand, loamy coarse sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy coarse sand, loamy coarse sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy coarse sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy coarse sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy sand, loamy s			loam, loam,	_	_	_		_	_	
15-21   Gravelly coarse   SP-SM, SM,   A-1-b, A-3   0   0-15	_		fine sandy	_	_			_	_	
15-21   Gravelly coarse   SP-SK, SM,   A-1.b, A-3   0   0-15   45-100   40-95	_		loam			_		_	_	
Sand, loamy fine   Sand, loamy   Sand, sand, loamy fine   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15   45-100   40-95	_	15-21	Gravelly coarse	SP-SM, SM,		0	0-15	45-100	_	20-70
Sand, sand,   Sand,   Sand,   Sand,   Sand   Stratified sand   Stratified sand   Sp, SP-SM   A-1, A-2, A-3   0   0-15   45-100   40-95   40-	_		sand, loamy			_		_	_	
Loamy fine   Band   GP, GP-GM,   A-1, A-2, A-3   0   0-15   45-100   40-95     Lo very   SP, SP-SM   A-1, A-2, A-3   0   0-15   45-100   40-95     Loame   CL-ML, CL   A-4, A-6   0   0-7   95-100   90-100     Loam   Silt loam   CL-ML   A-4, A-6   0   0-7   95-100   90-100     Loam   Silt loam   CL-ML   A-4, A-6   0   0-7   95-100   90-100     Loam   Silt loam   CL-ML   A-4, A-6   0   0-7   95-100   90-100     Loam   Sand, Loamy   SC, SM, CL,   A-1, A-2,   0   0-7   55-100   45-100     Loam   Sand, Loamy   SM, GP-GM   A-1-b, A-3   0   0-7   30-100   25-100     Loam   Sand, Loamy   SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   Sand   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   SP-SM, GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     Loamy coarse   SP-SM, GP-GM   A-1,	_		sand, sand,			_		_	_	
11-60   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15   45-100   40-95	_			_	_	_		_	_	
1-60   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15   45-100   40-95     Lo very   SP, SP-SM   A-1, A-2, A-3   0   0-15   45-100   40-95     Lo very   Gravelly   SP, SP-SM   A-4, A-6   0   0-7   95-100   90-100     Lo-32   Silt loam   CL-ML, CL   A-4, A-6   0   0-7   95-100   90-100     Lo-32   Silt loam   CL-ML   A-4   A-6   0   0-7   95-100   90-100     Lo-32   Silt loam   CL-ML   A-4, A-6   0   0-7   95-100   90-100     Lo-32   Silt loam   SC, SM, CL   A-1, A-2, A-6   0   0-7   95-100   90-100     Loam   Sandy   ML   A-4, A-6   0   0-7   55-100   45-100     Sand, loamy   SM, GP-GM   A-1-b, A-3   0   0-7   30-100   25-100     Loams coarse sand,   Cans	_		sand			_		_	_	
10   10   10   10   10   10   10   10	_	21-60			A-1, A-2, A-3	0	0-15	45-100	40-95	15-65
Gravelly   Coarse sand   CL-ML, CL   A-4, A-6   0   0-7   95-100   90-100	_		to very	SP, SP-SM		_		_	_	
			gravelly	_	_	_		_	_	
			coarse sand	_	_	_		_	_	
10-32   Silt loam   CL-ML, CL   A-4, A-6   0   0-7   95-100   90-100     10-32   Silt loam,   CL-ML   A-4   0   0-7   95-100   90-100     10-32   Silt loam,   CL   A-6   0   0-7   95-100   90-100     10-32   Silt loam,   CL   A-6   0   0-7   95-100   90-100     10-32   Silt loam,   CL   A-1, A-2,   0   0-7   95-100   90-100     10-34   Silt loam,   SM, CL,   A-1, A-2,   0   0-7   55-100   45-100     10-35   Ioam,   Smd,   Ioamy   SM, GM,   A-1-b, A-3   0   0-7   30-100   25-100     10-35   Sand,   Ioamy   SM, GP-GM   A-1-b, A-3   0   0-7   45-100   40-95     10-35   Sand   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Sand   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-GM   A-1, A-2, A-3   0   0-7   45-100   40-95     10-35   Ioamy   SP-SM,   GP-SM,   GP-SM,   GP-SM,   GP-SM,   GP-SM,   GP-SM,	315A:									
Silt loam         CL-ML         A-4         0         0-7         95-100         90-100           silt loam,         CL         A-6         0         0-7         95-100         90-100           silty clay         loam         loam         CL         A-1, A-2,         0         0-7         55-100         90-100           loam, sandy         ML         A-4, A-6         A-4, A-6         A-1, A-2,         0         0-7         55-100         45-100           sand, loamy         SM, GP-GM         A-1-b, A-3         0         0-7         30-100         25-100           sand, loamy         SM, GP-GM         A-1-b, A-3         0         0-7         30-100         25-100           very gravelly         SM, GP-GM         A-1, A-2, A-3         0         0-7         45-100         40-95           sand         Stratified sand   SP-SM, GP-GM, A-1, A-2, A-3         0         0-7         45-100         40-95           coarse sand         SP, GP         A-1, A-2, A-3         0         0-7         45-100         40-95	Rib	0-7	Silt loam			0	0-7	95-100	90-100	90-10
Silt loam,   CL   A-6   0   0-7   95-100   90-100		7-10	Silt loam	CL-ML		0	0-7	95-100	90-100	90-10
Silty clay   Loam   SC, SM, CL,   A-1, A-2,   0   0-7   55-100   45-100   10am, sandy   ML		10-32	Silt loam,	CI	A-6	0	0-7	95-100	90-100	90-10
Loam, gravelly   SC, SM, CL,   A-1, A-2,   0   0-7     Loam, sandy   ML   A-4, A-6     Loam   Gravelly loamy   SP-SM, GM,   A-1-b, A-3   0   0-7     sand, loamy   SM, GP-GM   A-1-b, A-3   0   0-7     coarse sand,			silty clay							
loam, sandy   ML		32-35	gravelly	S.W.	A-1. A-2.	c	0-7	55-100	45-100	35-90
Joam   Gravelly loamy   SP-SM, GM,   A-1-b, A-3   0   0-7			, sandy	ì	A-4, A-6	,				
Gravelly loamy   SP-SM, GM,   A-1-b, A-3   0   0-7   sand, loamy   SM, GP-GM   sand, loamy   SM, GP-GM   coarse sand,						_		_	_	
sand, loamy   SM, GP-GM	_	35-37	Gravelly loamy	SP-SM, GM,	A-1-b, A-3	0	0-7	30-100	25-100	25-75
sand, loamy	-									
coarse sand,										
very gravelly	_					_		_	_	
loamy coarse	_		very gravelly			_		_	_	
sand	_		loamy coarse	_	_			_	_	
Stratified sand   SP-SM,   QP-GM,   A-1, A-2, A-3   0   0-7   45-100   40-95     to very   SP, GP	_		sand			_		_	_	
	_	37-60		SP-SM, GP-GM,	A-1, A-2, A-3	0	0-7	45-100	40-95	15-65
gravelly	_		to very	SP, GP	_			_	_	
coarse sand	_		gravelly	_	_	_		_	_	
	_		coarse sand			_		_	_	

Table 23.--Engineering Index Properties--Continued

			Classification	cation	Fragi	Fragments	Pe	Percentage pass	pass
Map symbol	Depth	USDA texture						sieve number-	mber-
and		_			>10	3-10			
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	In				Pct	Pct			
337A:									
Plover	0-10	Fine sandy loam SM, ML	SM, ML	A-4	0	0	95-100	95-100 90-100 65-90	65-90
	10-13	Fine sandy	SC-SM, SM,	A-4	0	0	95-100	95-100 90-100 70-10	70-10
		loam, sandy	ML, CL-ML						
		loam, silt							
		loam							
	13-18	Fine sandy	CL-ML, ML,	A-4	0	0	95-100	95-100 90-100 70-10	70-10
		loam, sandy	SC-SM, SM				_		
		loam, silt					_		
_		loam			_		_		
	18-32	Fine sandy	SM, CL-ML,	A-4	0	0	95-100	95-100 90-100	65-95
		loam, sandy	ML, SC-SM				_		
_		loam, loam			_		_		
	32-60	Stratified fine	CL-ML, SC-SM, A-4	A-4	0	0	95-100	95-100 90-100	60-95
_		sand to silt	SM, ML		_		_		
John Homonia	c		700	·			- C	1	1
Mantomed1	0-0	Loamy sand	SM, SC-SM		<b>&gt;</b>	າ - ວ	00T-C8	83-100 /3-100 40-73	40-75
	2-8	Sand, coarse	SP-SM, SM	A-2, A-3	0	0-3	85-100	85-100 75-100	35-75
_		sand, loamy			_				
_		coarse sand			_				
	8-15	Gravelly coarse	SM, SP-SM	A-1	0	0-15	60-95	20-90	25-65
		sand, coarse							
		sand, gravelly							
		sand, sand							
	15-30	Gravelly sand,	SP-SM, SM	A-1, A-2, A-3	3 0	0-15	60-95	20-90	25-65
_		coarse sand,			_		_		
_		sand			_				
_	30-60	Gravelly sand,	SP-SM, SM	A-3, A-1, A-2	0	0-15	55-95	20-90	25-65
		coarse sand			_		_		
_		_			_		_		

Table 23. -- Engineering Index Properties -- Continued

Man avmbol	Depth	USDA texture	Classi	Classification	Fragments	ents	Pe	Percentage pas	pas
and	1				>10	3-10			
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	ä				Pct	Pct			
368B:									
Cress	0-3	Sandy loam	SM, SC	A-2-4, A-4	0	0-5	85-100	85-100   80-100   55-8	55-8
	3-15	Sandy loam,	SM, SC	A-2-4, A-4	0	0-5	85-100	80-100	55-8
		fine sandy			_				
	_	loam			_				
	15-31	Loamy sand,	SP-SM, SM	A-3	0	0-5	55-100   50-95	50-95	20-7
	_	coarse sand,			_				
		gravelly sand,		_	_				
		very gravelly			_				
		loamy sand		_	_				
	31-36	Gravelly loamy	SM, SP-SM	A-3	0	0-5	55-100	55-100   50-100   20-7	20-7
		sand, coarse			_				
	_	sand, gravelly			_				
		sand, very		_	_				
	_	gravelly loamy			_				
		sand			_				
	36-60	Stratified sand	sand GP, SP-SM,	A-1, A-2, A-3	0	0-5	30-100 25-95	25-95	15-6
		to very	SP, GP-GM	_	_				
	_	gravelly		_	_				
		coarse sand							
368C:									
Mahtomedi	0-5	Loamy sand	SC-SM, SM	A-2	0	0-3	85-100	85-100   75-100   40-7	40-7
	2-8	Sand, coarse	SM, SP-SM	A-2, A-3	0	0-3	85-100	85-100 75-100 35-7	35-7
	_	sand, loamy			_				
		coarse sand			_				
_	8-15	Gravelly coarse	SM, SP-SM	A-1	0	0-15	60-95	20-90	25-6
		sand, coarse			_				
		sand, gravelly			_				
		sand, sand			_				
	15-30	Gravelly sand,	SP-SM, SM	A-1, A-2, A-3	0	0-15	60-95	20-90	25-6
		coarse sand,			_				
	_	sand			_				
	30-60	Gravelly sand,	SP-SM, SM	A-3, A-1, A-2	0	0-15	55-95	20-90	25-6
		coarse sand			_				
	_	_		_	_				

Table 23.--Engineering Index Properties--Continued

	1	-	Classif	Classification	Fragm	Fragments	Per	Percentage pass	pass
and	Depth	רפערתופ			>10	3-10		)	- TACIIIT
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	п				Pct	Pct			
368C:									
Cress	0-3	Sandy loam	SC, SM	A-2-4, A-4	0	0-5	85-100	85-100 80-100 55-80	55-80
_	3-15	Sandy loam,	SC, SM	A-2-4, A-4	0	0-5	85-100	85-100   80-100   55-80	55-80
		fine sandy		_	_				
		loam		_	_				
_	15-31	Loamy sand,	SP-SM, SM	A-3	0	0-5	55-100 50-95	50-95	20-75
_		coarse sand,		_	_				
_		gravelly sand,		_	_				
		loamy sand							
_	31-36	Gravelly loamy	SM, SP-SM	A-3	0	0-5	22-100	55-100   50-100   20-75	20-75
_		sand, coarse			_				
_		sand, gravelly			_				
_		sand, very		_	_				
_		gravelly loamy		. —					
		sand		_					
	36-60	fied	sand GP, GP-GM,	A-1, A-2, A-3	0	0-5	30-100 25-95	25-95	15-65
		to very	SP-SM, SP						
		gravelly			_				
_		coarse sand		. —					
368D:									
Mahtomedi	0-5	Loamy sand	SM, SC-SM	A-2	0	0-3	85-100	85-100 75-100	40-75
_	2-8	Sand, coarse	SP-SM, SM	A-2, A-3	0	0-3	85-100	85-100 75-100 35-75	35-75
_		sand, loamy		_	_				
_		coarse sand			_				
	8-15	Gravelly coarse	SP-SM, SM	A-1	0	0-15	60-95	20-90	25-65
		sand, coarse							
_		sand, gravelly			_				
_		sand, sand			_				
_	15-30	Gravelly sand,	SM, SP-SM	A-1, A-2, A-3	0	0-15	60-95	20-90	25-65
_		coarse sand,			_				
_		sand			_				
_	30-60	Gravelly sand,	SM, SP-SM	A-3, A-1, A-2	0	0-15	25-95	20-90	25-65
_		coarse sand			_				
		_		_	_				

Table 23. -- Engineering Index Properties -- Continued

Map symbol	Depth	USDA texture	Classif	Classification	Fragments	nents	Per	Percentage pass	pass mber-
and					>10	3-10			
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	ų				Pct	Pct			
368D:									
Cress	0-3	Sandy loam	SM, SC	A-2-4, A-4	0	0-5	85-100	85-100 80-100 55-80	55-80
	3-15	Sandy loam,	SC, SM	A-2-4, A-4	0	0 - 5	85-100	85-100   80-100   55-80	55-80
_									
	15-31	Loamy sand,	SM, SP-SM	A-3	0	0-5	55-100 50-95	50-95	20-75
		gravelly sand,		. —	_		_	_	
		very gravelly		_	_		_	_	
		loamy sand		_	_			_	
	31-36	Gravelly loamy	SP-SM, SM	A-3	0	0-5	55-100	55-100   50-100   20-75	20-75
_		sand, coarse		_	_		_	_	
_		sand, gravelly		_	_		_	_	
_		sand, very		_	_		_	_	
		gravelly loamy		_	_		_	_	
_		sand			_		_		
	36-60	Stratified sand GP, SP-SM,	GP, SP-SM,	A-1, A-2, A-3	0	0-5	30-100 25-95	_	15-65
		to very	GP-GM, SP		_		_		
_		gravelly		_					
		coarse sand							
371A:									
Croswell	0-1	Loamy sand	SM	A-1-b, A-2-4	0	0	80-100	80-100   75-100   30-75	30-75
	1-7	Loamy sand,	SC-SM, SM,	A-1-b, A-2	0	0	90-100	90-100 75-100 40-75	40-75
		sand	SP-SM	_	_		_	_	
	7-16	Loamy sand,	SM, SP, SP-SM	SP-SM A-1-b, A-2-4,	0	0	90-100	90-100 75-100 40-75	40-75
_		sand			_		_	_	
	16-39	Sand, loamy	SM, SP, SP-SN	SP-SM A-1-b, A-2-4,	0	0	001-06	90-100 75-100 40-75	40-75
		sand		A-3	_		_	_	
_	39-60	Sand	SM, SP, SP-SM A-1-b,	(A-1-b, A-2-4,	0	0	001-06	90-100   75-100   40-70	40-70
				A-3	_		_		
		_						_	

Table 23. -- Engineering Index Properties--Continued

and III III III III III III III III III I	Lodmys new	100C	4 &CDII	† † †	Classif	Classification		Fragments	ents	Per	Percentage pass	pass
11   name   In	and	Depth		ארמו				>10	3-10	n 	)	- Tagnir
Secondary   Seco	soil name				Unified	AASHTO	-	inches	inches	4	10	40
Sandy loam,   SC, SM   A-2-4, A-4   0   0-5		п						Pct	Pct			
15-31   Loamy sand,   S.C. SM   A-2-4, A-4   0   0-5     15-31   Loamy sand,   S.C. SM   A-3   0   0-5     15-31   Loamy sand,   S.C. SM   A-3   0   0-5     15-32   Loamy sand,   S.C. SM, SM   A-3   0   0-5     15-34   Loamy sand,   S.C. SM, SM   A-3   0   0-5     15-35   Loamy sand,   S.C. SM, SM   A-3   0   0-5     15-36   Sand, very   S	380B:		- —	_			_			_		
3-15   Sandy   loam,   SC, SM   A-2-4, A-4   0   0-5	Cress	0-3	Sandy lo	am			4.	0	0-5	85-100	80-100	55-80
15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5	_	3-15		am,			4,	0	0-5	85-100	80-100	55-80
15-31												
Coase sand,   Sevelly	_	15-31	Loamy sa	nd,		A-3		0	0 - 5	55-100	50-95	20-75
Gravelly sand,			coarse	sand,				_				
very gravelly			gravell	y sand,								
31-36   Gravelly   SP-SM, SM   A-3   0   0-5	_		very gr	avelly		_	_	_		_		
31-36   Gravelly loamy   SP-SM, SM   A-3   0   0-5	_		loamy s	and		_	_	_		_		
Sand, coarse   Sand, gravelly   Sand, gravelly loamy   Gravelly loamy   Gravelly loamy   Gravelly loamy   Gravelly   Gr	_	31-36	Gravelly	loamy		A-3	_	0	0-5	55-100	50-100	20-75
Sand, very				oarse								
Sand, very   Sand, very				ravelly								
Sandy loamy   SP-SM, SP,   A-1, A-2, A-3   0   0-5			sand, v	ery								
36-60   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-5			gravell	у тоашу								
		36-60	Sand			-	ا ا		ر ا ا	30-100	25.05	15-65
Coarse sand   Coarse sand			1		_	7 4 7 4	4	 •	0		1	)   
Sandy loam   SM   A-2, A-4   0   0-3			co very									
10-14   Sandy loam   SM   A-1, A-2, A-4   0   0-3     10-14   Sandy loam, gravelly   Sandy loam, gravelly   I   I   I   I   I   I   I   I   I				להפמ								
Sandy loam   SM   A-2, A-4   0   0-3     S-10   Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3     Loam, gravelly   Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3     Loam, gravelly   Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3     Loam, gravelly   Sandy loam,   SM, SC   A-1, A-2, A-4   0   0-3     Loam, gravelly   SM, SC   A-1, A-2, A-4   0   0-3     Loam, gravelly   SM, SC   A-1, A-2, A-4   0   0-3     Loam, gravelly   SM, SC   A-1, A-2, A-4   0   0-25     Loam, gravelly   SP-SM, SM,   A-1, A-2, A-3   0   0-25     Sand, very   SP-SM, SM,   A-1, A-2, A-3   0   0-25     Loams   Sand, very   SP-SM,   SP-			) 1 3 3 0					_				
Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3     Loam, gravelly	Rosholt	8-0	Sandy lo		SM	A-2, A-4	_	0	0-3	80-100	75-100	50-75
fine sandy	_	8-10	Sandy lo			A-1, A-2,	A-4	0	0-3	55-100	50-100	35-75
loam, gravelly	_					_	_			_		
Sandy   Sand   SC-SM, SM   A-1, A-2, A-4   0   0-3     Ine sandy   S				ravelly		_	_	_		_		
Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3     Line sandy			loamy s	and			_					
fine sandy  loam, gravelly  loamy sand  Sandy loam,  fine sandy  loam  Gravelly loamy  Gravelly  coarse sand,  sand  Stratified sand GP, GP-GM,  coarse sand  Gravelly  coarse sand  SP, SP-SM,  SM,  A-1, A-2, A-3  Co-25  Coarse sand  SP, SP-SM,  GM,  GP-GM  ST,  A-1, A-2, A-3  Co-25  Coarse sand  SP, SP-SM,  Co-25  Coarse sand  SP, SP-SM,  Co-25  Coarse sand  Co-25  Coarse sand  Coarse sand  Coarse sand  Coarse sand		10-14	Sandy lo	am,		A-2,	A-4	0	0-3	55-100	50-100	35-75
Loam, gravelly   Loamy sand   Sandy loam,   SM, SC   A-1, A-2, A-4   0   0-3     fine sandy				ndy			_	_				
Loamy sand   Sw, SC   A-1, A-2, A-4   0   0-3     fine sandy	_			ravelly		_	_	_		_		
Sandy loam,   SM, SC   A-1, A-2, A-4   0   0-3     fine sandy			loamy s	and				_				
fine sandy loam, gravelly loam Gravelly loamy SP-SM, SM, A-1, A-2, A-3 0 0-25 sand, very GM, GP-GM Gravelly coarse sand, sand Stratified sand GP, GP-GM, A-1, A-2, A-3 0 0-25 to very Gravelly coarse sand Stratified sand GP, GP-GM, A-1, A-2, A-3 coarse coarse sand GRAVELLY		14-28	Sandy lo	am,			A-4	0	0-3	55-100	50-100	35-80
loam, gravelly				ndy								
Loam   Gravelly loamy   SP-SM, SM,   A-1, A-2, A-3   0   0-25   Sand, very   GM, GP-GM     GM, GP-GM				ravelly				_				
Gravelly loamy   SP-SM, SM,   A-1, A-2, A-3   0   0-25     sand, very   GM, GP-GM			loam	_				_				
sand, very         GM, GP-GM           gravelly         coarse sand,           sand         stratified sand GP, GP-GM,           to very         SP, SP-SM           gravelly         coarse sand		28-34	Gravelly	loamy	SP-SM, SM,	A-1, A-2,	A-3	0	0-25	30-100	25-100	20-80
gravelly         coarse sand,         sand         Stratified sand GP, GP-GM,       A-1, A-2, A-3       0 0-25         to very       SP, SP-SM         gravelly       coarse sand			sand, v	ery								
Coarse sand,			gravell	^								
sand   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-25     to very   SP, SP-SM     gravelly			coarse	sand,								
Strailfied sand GP, GP-GM,   A-1, A-2, A-3   0   0-25			sand				-	_ (	,			,
SP, and —		34-60	Stratifi		0	A-1, A-2,	A-3	0	0-25	30-100	25-100	15-65
gravelly   coarse sand 			to very									
coarse sand			gravell	×			_					
	_		coarse	sand		_	_			_		
			_									

Table 23. -- Engineering Index Properties -- Continued

soil name   1	1	ער מרט דו		;	Classification	ation		Frag	Fragments	Per	Percentage pass	pass
il name	1				-			>10	3-10			
				Unified	ď	AASHTO	OLI	inches	inches inches	4	10	40
	u.							Pct	Pct			
					- — -							
	0-3	Sandy loam	loam	SM, SC	4	A-2-4, A-4	A-4	0	0-2	85-100	85-100 80-100 55-80	55-80
	3-15	Sandy	Loam,	SC, SM	<u> </u>	-2-4,	A-4	0	0-5	85-100	85-100 80-100 55-80	55-80
		loam	7									
1	15-31	Loamy	sand,	SM, SP-SM		A-3		0	0-5	55-100 50-95	50-95	20-75
_	-	coars	coarse sand,		_			_	_	_		
_	-	grave	gravelly sand,		_			_	_	_		
_		very (	very gravelly		_			_	_	_		
_		loamy sand	sand		_			_	_	_		
31	31-36	Gravel	Gravelly loamy	SP-SM, SM		A-3		0	0-2	55-100	55-100   50-100   20-75	20-75
_		sand,			_			_	_	_		
		sand,										
		sand,	very									
		grave	gravelly loamy									
		sand						_				
36	36-60	Strati	Stratified sand   GP,	GP, GP-GM,	_	A-1, A-	A-2, A-3	0	0-2	30-100 25-95	25-95	15-65
_	_	to very	ry	SP, SP-SM	— W			_	_	_		
_		gravelly	117		_			_	_	_		
		coars	coarse sand									
1	0			2		ć	_			0	1	, ,
	0 7		TOGILL	- DE		A-4, A-4		<b>-</b>	0 0	0 0 0	001 001 001 001 001 100	0 1
<b></b>	8-10		loam,	SM, SC-SM		A-1, A-	A-2, A-4		0-3	25-100	50-100	35-75
		fine			_							
		loam,			_							
		loamy	sand		_							
	10-14		loam,	SC-SM, SM		A-1, A-	A-2, A-4	0	0-3	55-100	55-100   50-100	35-75
		fine			_							
		loam,										
		loamy	sand		_							
14	14-28	Sandy loam,	loam,	SM, SC	₹.	A-1, A-	A-2, A-4	0	0-3	55-100	55-100 50-100	35-80
		fine	sandy									
		loam,	gravelly		_							
_		loam	_									
- 28	28-34	Gravel	Gravelly loamy	GP-GM, SM,		A-1, A-2,	2, A-3	0	0-25	30-100	30-100   25-100   20-80	20-80
_		sand, very	very	SP-SM, G	GM			_	_	_		
_		gravelly	11y		—			_	_	_		
_		coarse	e sand,		_			_	_	_		
_		sand	_		_			_	_	_		
34	34-60	Stratified		sand SP, GP,	<u>4</u>	A-1, A-2,	2, A-3	0	0-25	30-100	30-100 25-100 15-65	15-65
_		to very	ry	SP-SM, G	GP-GM			_	_	_		
		gravelly	11y									
		coarse	e sand					_				
		_			_			_				

Table 23. -- Engineering Index Properties--Continued

and In	Lodamia creM	Den th		4					_		,	_	eiere number-	ajewa number-
11   12   12   12   13   14   15   15   15   15   15   15   15	map symbor and	Deptu	USDA CEXCU	n D						>10	3-10		II e e e II	- incer
The control of					ū	nified	Æ	ASHTO	ŗ	nches	inches	4	10	40
Sandy loam,   SC, SK   A-2-4, A-4   0   0-5		uI								Pct	Pct			
15-31   Sandy loam   SC, SM   A-2-4, A-4   0   0-5     15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5     15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5     15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5     15-31   Loamy sand,   SW, SP-SM   A-3   0   0-5     15-31   Loamy sand,   SW, SP-SM   A-3   0   0-5     15-31   Loamy sand   SW, SP-SM   A-3   0   0-5     15-31   Loamy sand   SP-SM   A-1, A-2, A-3   0   0-5     15-31   Loamy sand   SP-SM   A-1, A-2, A-4   0   0-3     15-31   Loamy sand   SC-SM, SM   A-1, A-2, A-4   0   0-3     15-31   Loamy sand   SC-SM, SM   A-1, A-2, A-4   0   0-3     15-31   Loamy sand   SC-SM, SM   A-1, A-2, A-4   0   0-3     15-31   Loamy sand   SC-SM, SM   A-1, A-2, A-4   0   0-3     15-31   Loamy sand   SC-SM, SM   A-1, A-2, A-4   0   0-3     15-31   Loamy sand   SC-SM, SM   A-1, A-2, A-4   0   0-3     15-31   Loamy sand   SC-SM, SM   A-1, A-2, A-4   0   0-3     15-31   Loamy gravelly   SC-SM, SM   A-1, A-2, A-4   0   0-3     15-32   Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3     15-32   Gravelly   SC-SM, SM   A-1, A-2, A-4   0   0-3     15-34   Gravelly   SC-SM, SM   A-1, A-2, A-3   0   0-25     15-34   Gravelly   SC-SM, SP,   A-1, A-2, A-3   0   0-25     15-34   Gravelly   SC-SM, SP,   A-1, A-2, A-3   0   0-25     15-35   Sand, very   GW, SP-SM   A-1, A-2, A-3   0   0-25     15-35   Gravelly   SC-SM, SP,   A-1, A-2, A-3   0   0-25     15-35   Sand, very   GP-SM, SP,   A-1, A-2, A-3   0   0-25     15-35   Gravelly   SC-SM, SP,   A-1, A-2, A-3   0   0-25     15-35   GC-SM, SM   A-1, A-2, A-3   0   0-25     15-35   GC-SM, SM   A-1, A-2, A-3   0   0-25     15-35   GC-SM, SM   A-1, A-2, A-3   0   0-25     15-35   GC-SM, SM   A-1, A-2, A-3   0   0-25     15-35   GC-SM, SM   A-1, A-2, A-3   0   0-25     15-35   GC-SM, SM   A-1, A-2, A-3   0   0-25     15-35   GC-SM, SM   A-1, A-2, A-3   0   0-25     15-35   GC-SM, SM   A-1, A-2, A-3   0   0-25     15-35   GC-SM, SM   A-1, A-2, A-3   0   0-25     15-35   GC-SM, SM   A-1, A-2, A-3   0   0-25     15-35   GC-SM, SM   A-1, A-2, A-	380D:													
3-15   Sandy loam,   SW, SC   A-2-4, A-4   0   0-5	Cress	0-3	Sandy loam			SM	A-2-		_	0	0-5	85-100	80-100	55-80
15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5		3-15				D M	A-2-			0	0-2	85-100	80-100	55-80
15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5														
coarse sand,   coarse sand,   coarse sand,   coarse sand,   very gravelly   sand,   very gravelly   sand,   coarse		15-31				SP-SM	A-3			0	0-5	55-100	50-95	20-75
gravelly sand,			coarse san	ď,			_							
10-any sand   20-any sand			gravelly s	and,			_		_	_		_		_
31-36   Gravelly loamy   SM, SP-SM   A-3   0   0-5     sand, gravelly   Sand, gravelly     sand, very   Sand, gravelly     sand, very   SP-SM   A-1, A-2, A-3   0   0-5     sand, very   SP-SM   A-1, A-2, A-4   0   0-3     to very   SP, SP-SM   A-1, A-2, A-4   0   0-3     tine sandy   SC-SM, SM   A-1, A-2, A-4   0   0-3     tine sandy   SC-SM, SM   A-1, A-2, A-4   0   0-3     tine sandy   SC-SM, SM   A-1, A-2, A-4   0   0-3     tine sandy   SC-SM, SM   A-1, A-2, A-4   0   0-3     tine sandy   SC-SM, SM   A-1, A-2, A-4   0   0-3     tine sandy   SC-SM, SM   A-1, A-2, A-4   0   0-3     tine sandy   SC-SM, SM   A-1, A-2, A-4   0   0-3     tine sandy   SC-SM, SM   A-1, A-2, A-4   0   0-3     tine sandy   SC-SM, SM   A-1, A-2, A-3   0   0-25     sand, very   GM, SP-SM   SP-SM			very grave	11y			_		_	_		_		_
31-36   Gravelly loamy   SM, SP-SM   A-3   0   0-5			loamy sand								1			
Sand, Coarse   Sand, Coarse   Sand, coarse   Sand, coarse   Sand, very   GP-GM,   A-1, A-2, A-3   0   0-5		31-36	Gravelly lo			SP-SM	A-3			0	0-2	55-100	50-100	20-75
Sand, very   Sand, very				2 c										
Sand   Sand   SP. SP-SM   A-1, A-2, A-3   0   0-5				7 .										
Send   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-5     to very   SP.SM   Garselly   Garse sand   Goarse Garse sand   Garse			gravelly 1	oamv										
36-60   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-5     coarse sand   SP, SP-SM   A-1, A-2, A-4   0   0-3     coarse sand   SM   A-2, A-4   0   0-3     loam, gravelly   SC-SM, SM   A-1, A-2, A-4   0   0-3     loam, gravelly   SC-SM, SM   A-1, A-2, A-4   0   0-3     loam, gravelly   SC-SM, SM   A-1, A-2, A-4   0   0-3     loam, gravelly   SC-SM, SM   A-1, A-2, A-4   0   0-3     loam, gravelly   SC-SM, SM   A-1, A-2, A-4   0   0-3     loam, gravelly   SM, GP-GM,   A-1, A-2, A-3   0   0-25     sand, very   GM, SP-SM   SA-1, A-2, A-3   0   0-25     sand, very   GM, SP-SM   SA-1, A-2, A-3   0   0-25     coarse sand,   Coarse sand,   COARSE sand			sand				_							
to very   SP, SP-SM   Gravelly   Goarse sand   Sandy loam   SM   A-2, A-4   0   0-3		36-60		sand		3P-GM,	A-1,	A-2, 2	4-3	0	0-5	30-100	25-95	15-65
Gravelly   Goarse sand   SM   A-2, A-4   0   0-3     8-10   Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3     10-14   Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3     10-14   Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3     14-28   Sandy loam,   SC, SM   A-1, A-2, A-4   0   0-3     14-28   Sandy loam,   SC, SM   A-1, A-2, A-4   0   0-3     14-28   Sandy loam,   SC, SM   A-1, A-2, A-4   0   0-2     14-28   Sandy loam,   SC, SM   A-1, A-2, A-3   0   0-2     14-28   Sandy loam,   SC, SM   A-1, A-2, A-3   0   0-2     14-28   Sandy loam,   SM, GP-GM,   A-1, A-2, A-3   0   0-2     14-28   Sand, very   GM, SP-SM   A-1, A-2, A-3   0   0-2     14-29   Sand, very   GM, SP-SM   A-1, A-2, A-3   0   0-2     14-29   Sand, very   GP-GM, GP   A-1, A-2, A-3   0   0-2     14-29   Sand   SP-SM, SP,   A-1, A-2, A-3   0   0-2     14-20   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-2     14-20   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-2     14-20   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-2     14-20   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-2     14-20   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-2     14-20   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-2     14-20   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-2     14-20   STRATIFIED   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-2     14-20   STM, SP,   A-1, A-2, A-3   0   0-3     14-20   STM, SP,   A-1			to very		SP,	SP-SM	_		_					
			gravelly						_	_		_		
Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3     Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3     Loamy sand   oams gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-25     Loams gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-25     Loams gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-25     Loams gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-25     Loams gravelly   GP-GM, GP   A-1, A-2, A-3   0   0-25     Loams gravelly   GP-GM, GP-GM			coarse san	, d			_		_	_		_		
# 8-10   Sandy loam, fine sandy   SC-SM, SM   A-1, A-2, A-4   0   0-3     loam, gravelly   SC-SM, SM   A-1, A-2, A-4   0   0-3     loam, gravelly   SC-SM, SM   A-1, A-2, A-4   0   0-3     loam, gravelly   SC, SM   A-1, A-2, A-4   0   0-3     loam, gravelly   SC, SM   A-1, A-2, A-4   0   0-3     loam, gravelly   SC, SM   A-1, A-2, A-4   0   0-3     loam, gravelly   SM, GP-GM, A-1, A-2, A-3   0   0-25     sand, very   GM, SP-SM   A-1, A-2, A-3   0   0-25     sand   Sand   SP-SM, SP, A-1, A-2, A-3   0   0-25     to very   GP-GM, GP   A-1, A-2, A-3   0   0-25     coarse sand   GP-SM, SP, A-1, A-2, A-3   0   0-25     coarse sand   GP-SM, S	Rosholt	8-0	  Sandv loam		SM		A-2,			0	0-3	80-100	75-100	50-75
Sundy loam,   Subsection   Su			100	_	5									
loam, gravelly     loamy sand   SC-SM, SM   A-1, A-2, A-4   0   0-3     fine sandy		0 T - 8	Sandy loam,   fine sandy		SC-S		A-1,	A-2,	4. 4. — —	>	0 - 3	00T-99	00T-05	35-75
Sandy   Sand   SC-SM, SM   A-1, A-2, A-4   0   0-3     Inex sandy   Sc, SM   A-1, A-2, A-4   0   0-3     Inoamy sand   SC, SM   A-1, A-2, A-4   0   0-3     Inoamy sand   SC, SM   A-1, A-2, A-4   0   0-3     Inoam, gravelly   SM, GP-GM, A-1, A-2, A-3   0   0-25     Sand, very   GM, SP-SM   Coarse sand   SP-SM, SP, A-1, A-2, A-3   0   0-25     Inoams   SM, GP-GM, GP   SM, SP, GP-GM, GP   Coarse sand   SP-SM, SP, GP-GM, GP   Coarse sand   SP-SM, SP, GP-GM, GP   Coarse sand   SP-SM, SP, GP-GM, GP   Coarse sand   SP-SM, SP, GP-GM, GP   Coarse sand   SP-SM, SP, GP-GM, GP   Coarse sand   SP-SM, SP, GP-GM, GP   Coarse sand   SP-SM, SP, GP-GM, GP   Coarse sand   SP-SM, SP, GP-GM, GP   Coarse sand   SP-SM, SP, GP-GM, GP   Coarse sand   SP-SM, SP, GP-GM, GP   Coarse sand   SP-SM, SP, GP-GM, GP   SP-SM, SP, GP-GM, GP   SP-SM,			loam, grav	e11y					_	_				
Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-3     In sandy			loamy sand	_										
Line sandy		10-14	Sandy loam,		SC-S		A-1,	A-2,	A-4 —	0	0-3	55-100	50-100	35-75
Loam, gravelly   SC, SM   A-1, A-2, A-4   0   0-3     Sandy loam, gravelly			Time samay	ŗ										
Sandy loam,   SC, SM   A-1, A-2, A-4   0   0-3     fine sandy			loam, grav	етту										
fine sandy loam, gravelly loam Gravelly loamy SM, GP-GM, A-1, A-2, A-3 0 0-25 sand, very GM, SP-SM gravelly coarse sand, sand Stratified sand SP-SM, SP, A-1, A-2, A-3 0 0-25 to very GP-GM, GP		14-28	rodmy same	_		×	۸ - ۲	Z _ Z	4-4		7	77.1	50-100	35.80
loam, gravelly		1	fine sandv			4	i G	4		,		) 	) H	
Loam   Gravelly loamy   SM, GP-GM,   A-1, A-2, A-3   0   0-25				e11v										
Gravelly loamy   SM, GP-GM,   A-1, A-2, A-3   0   0-25     sand, very   GM, SP-SM				•										
sand, very         GM, SP-SM           gravelly         coarse sand,           sand         Stratified sand SP-SM, SP,           to very         GP-GM, GP           gravelly         GP-GM, GP		28-34	Gravelly lo			3P-GM,	A-1,		4-3	0	0-25	30-100	25-100	20-80
gravelly         coarse sand,           sand         Stratified sand   SP-SM, SP,         A-1, A-2, A-3         0 0-25           to very         GP-GM, GP         Coarse sand			sand, very		GM,	SP-SM	_			-				
coarse sand,  sand Stratified sand SP-SM, SP, A-1, A-2, A-3 0 0-25 to very GP-GM, GP			gravelly				_							
Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-25   to very   GP-GM, GP     Gravelly     GP-GM   GP			coarse san	ď,			_							
Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-25     to very   GP-GM, GP			sand				_		_	_		_		_
		34-60		sand	SP-S	M, SP,	A-1,	A-2,	4-3	0	0-25	30-100	25-100	15-65
gravelly coarse sand			to very		GP-(	BM, GP	_		_	_				_
Goarse sand			gravelly				_		_			_		_
			coarse sand	- G					_			_		

Table 23. -- Engineering Index Properties -- Continued

Codumin	, ,	4 4001	Classif	Classification		Fragments	Pe	Percentage pass	e pass
map symbor and	ה הביים היים ביים				>10	3-10		D A D T n	- TACIIIT
soil name			Uni fied	AASHTO	inches		4	10	40
	u I				Pat	Pct			
383B:	,							; ;	
Mantomedi	0 u	Loamy sand	SC-SM, SM	A-2 c		5 0	85-L00	85-100   75-100   40-75 9E 100   7E 100   3E 7E	40-75
	) )	sand, loamy			- 	n - —	0 1 0 0	0 1	0 / 1 0 0
		ñ							
	8-15	Gravelly coarse	SP-SM, SM	A-1	0	0-15	60-95	20-90	25-65
		sand, coarse		_	_	_	_		
		sand, gravelly		_	_	_	_		
		sand, sand		_	_		_		
	15-30	Gravelly sand,	SM, SP-SM	A-1, A-2,	A-3 0	0-15	60-95	20-90	25-65
		coarse sand,		_	_		_		
		sand		_	_	_	_		_
	30-60	Gravelly sand,	SM, SP-SM	A-3, A-1,	A-2 0	0-15	55-95	20-90	25-65
		coarse sand							
3830:									
Mahtomedi	0-5	Loamy sand	SM. SC-SM	A-2	0	0-3	85-100	75-100	40-75
	0 00	ď	SP-SM. SM	A-2 A-3	o c	0 0	85-100		35-75
	) 	, loamy		1	- 	) - —	) 		
		coarse sand		_	_	_	_	_	
	8-15	Gravelly coarse	SP-SM, SM	A-1	0	0-15	60-95	20-90	25-65
		sand, coarse		_	_	_			
		sand, gravelly		_	_	_	_	_	
		sand, sand		_	_		_		_
	15-30	>-	SM, SP-SM	A-1, A-2,	A-3 0	0-15	60-95	20-90	25-65
		coarse sand,							
	30-60		SM, SP-SM	A-3, A-1,	A-2 0	0-15	55-95	20-90	25-65
		coarse sand							
383D:									
Mahtomedi	0-5	Loamy sand		A-2	0	0-3	85-100	85-100   75-100   40-75	40-75
	2-8	Sand, coarse	SP-SM, SM	A-2, A-3	0	0-3	85-100	75-100	35-75
		sand, loamy			_	_	_		
		coarse sand			_				
	8-15	Gravelly coarse	SM, SP-SM	A-1	0	0-15	60-95	20-90	25-65
		sand, coarse		_	_		_		
		sand, gravelly		_		_	_	_	_
		sand, sand							
	15-30	Gravelly sand,	SM, SP-SM	A-1, A-2,	A-3 0	0-15	60-95	20-90	25-65
		coarse sand,							_
		sand							
	30-60	Gravelly sand,	SP-SM, SM	A-3, A-1,	A-2 0	0-15	55-95	20-90	25-65
		coarse sand		_	_		_		_
					_	_	_	_	

Table 23. -- Engineering Index Properties -- Continued

Sand         SM         A-2, A-3         0         0         95-100         90-100           Sand         SM         A-2, A-3         0         0         95-100         90-100           Sand         SM         A-2, A-3         0         0         95-100         90-100           Sand         SM         A-2, A-3         0         0         95-100         90-100           Sand         SM         A-2, A-3         0         0         95-100         90-100           Sand         SM         A-2, A-3         0         0         95-100         90-100           Sand         SM         A-2, A-3         0         0         95-100         90-100           Sand         SM         A-2, A-3         0         0         95-100         90-100           Sand         SM         A-2, A-3         0         0         95-100         90-100           Sand         SM         A-2, A-3         0         0         95-100         90-100           Sand         SM         A-2, A-3         0         0         95-100         90-100           Inea         SM, SP-SM         A-2, A-3         0         0         90-100<	and soil name	Denth	USDA texture	Classif	Classification	Fragments	nents	Per	Percentage pass sieve number-	pass mber-
1.0   1.0		1 1 1				>10	3-10			
Dec   Pet				Unified	AASHTO	inches	inches	4	10	40
ndship   0-4   Sand   SM   A-2, A-3   0   0   95-100   90-100     29-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     29-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     30-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     30-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     30-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     30-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     30-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     30-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     30-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     30-60   Sand   SM   SP-SM   A-2-4   0   0   90-100     40-60   Sand   A-2, A-3   0   0   90-100     40-60   Sand   SM   A-2, A-3   0   0   90-100     40-60   SAnd   SM   A-2, A-3   0   0   90-1		u.				Pat	Pct			
11   12   13   15   15   15   15   15   15   15	396B:									
1.00   1.00	Friendship	0 - 4	Sand	SM		0	0	95-100	90-100	60-75
11.00   11.00   12.00   13.0		4-29	Sand	SM	Ā	0	0	95-100	90-100	60-75
### 19   0-6   Sand   SK   A-2, A-3   0   0   0   85-100   75-100		29-60	Sand	SM	ď	0	0	95-100	90-100	60-75
11-2	Wurtsmith	9-0	Sand	SM	A-	0	0	85-100	75-100	50-70
11ng  0-3   Sand   SM   A-2, A-3   0   0   95-100   97-100     15-28   Sand   SM   A-2, A-3   0   0   95-100   97-100     15-28   Sand   SM   A-2, A-3   0   0   95-100   97-100     15-28   Sand   SM   A-2-4   0   0   95-100   97-100     15-28   Sand   SM   SP-SM   A-2-4   0   0   95-100   97-100     15-29   Sand   SM   SP-SM   A-2-4   0   0   95-100   97-100     15-29   Sand   SM   SP-SM   A-2-4   0   0   95-100   97-100     15-20   Sand   SM   SP-SM   A-2-4   0   0   0   97-100   97-100     15-20   Sand   SM   SP-SM   A-2-4   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng   0-3   Sand   SM   A-2   A-3   0   0   0   97-100   97-100     11ng		6-33	Sand	SM	Ą	0	0	85-100	75-100	50-70
11   12   2   2   2   2   2   2   2		33-60	Sand	SM		0	0	85-100	75-100	50-70
15-23   Sand   SM   A-2, A-3   0   0   0   0   0   0   0   0   0		· ·	77				c			2
13-23   Sand   SM   A-2, A-3   0   0   0   0   0   0   0   0   0	בייייייייי איזיי אלא זא	) r	מוווס	H C		 				1 0
13-62   Sand   SM   A-2, A-3   0   0   0   99-100   90-100		3-T2	Sand	E S		o (	<b>o</b> (	95-T00	00T-06	00-75
18-2   10-amy fine sand   SM   A-2-4   0   0   0   0   0   0   0   0   0		T5-23	Sand	E S		o (	<b>o</b> (	95-T00	00T-06	00-75
hinke    9-18   Frine sand,   SM, SP-SM   A-2-4   0   0   90-100   85-100     sand, loamy sand   SP-SM, SM   A-2-4   0   0   90-100   85-100     sand, loamy sand   SP-SM, SM   A-2-4   0   0   90-100   85-100     sand, loamy sand   SP-SM, SM   A-2-4   0   0   90-100   85-100     sand, loamy sand   SP-SM, SM   A-2-4   0   0   90-100   85-100     sand, loamy sandy   SC-SM, SM   A-4   0   0   90-100   85-100     sand, loam, sandy   SC-SM, SM   A-2, A-3   0   0   90-100   85-100     loam, loam   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     ling   0-3   Sand   SM   A-3, A-3   0   0   95-100   90-100     ling		73-60	Sand	W S		 	>	00T-c		67-09
hiake    18-42   Fine sand,   SM, SP-SM   A-2-4   0   0   90-100   85	397A:									
9-18   Fine sand, loamy   A-2-4   0   0   90-100   85-100     Fine sand, loamy   Fine sand, loamy   Fine sand, loamy   Fine sand, loamy   Fine sand, loamy   Fine sand, loamy   Fine sand, loamy   Fine sand, loamy   Fine sand, loam, loam   A-2-4, A-3   0   0   90-100   85-100     42-46   Fine sand, loamy   A-2-4, A-3   0   0   90-100   85-100     10-am, loam, loam   A-2-4, A-3   0   0   90-100   85-100     11-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-24   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-25   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-25   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-25   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-25   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-25   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-26   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-27   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-28   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-29   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-29   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-20   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-20   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-20   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-20   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-20   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-20   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-20   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-20   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-20   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-20   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-20   Sand   SM   A-2, A-3   0   0   95-100   90-100     11-20   Sand   SM   A-2, A-3   0   0   95-1	Perchlake	6-0	fine		A-2-4	0	0	_		75-95
18-42   Sand, loamy   Fine sand,   Fine sa		9-18	Fine sand,		A-2-4	0	0	-100		75-95
18-42   Sand, loany   SP-SM, SM   A-2-4   0   0   90-100   85-100     18-42   Sand, loany   SP-SM, SM   A-2-4   0   0   90-100   85-100     fine sand, fine sand, fine sand, loan, sandy   10-am, sandy   10-am, fine sand   23-60					_	_		_	_	
18-42   Sand, loamy sand   A-2-4   0   0   0   0   0   0   0   0   0			fine sand,			_				
18-42   Sand, loamy   SP-SM, SM   A-2-4   0   0   90-100   85-10			⊳						_	
Fine sand,   Fine sand,   Fine sand,   Fine sand,   Fine sand,   Fine sand,   Fine sand,   Fine sand,   Fine sand,   Fine sand,   Secorate S		18-42			A-2-4	0	0		85-100	40-55
42-46   Fine sand,   A-4   0   0   90-100   85-100   1-0am, sandy   1-0am, loam   A-2-4, A-3   0   0   90-100   85-100   1-0am, sandy   A-2-4, A-3   0   0   90-100   85-100   1-0am, loam   A-2-4, A-3   0   0   90-100   85-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4-4, A-3   0   0   95-100   90-100   1-0am, loam   A-2-4-4-4   A-2-4-4-4   0   0   95-100   90-100   1-0am, loam   A-2-4-4-4-4   0   0   95-100   90-100   1-0am, loam   A-2-4-4-4-4   0   0   95-100   90-100   1-0am, loam   A-2-4-4-4-4   0   0   95-100   90-100   1-0am, loam   A-2-4-4-4-4   0   0   95-100   90-100   1-0am, loam   A-2-4-4-4-4   0   0   95-100   90-100   1-0am, loam   A-2-4-4-4-4   0   0   95-100   90-100   1-0am, loam   A-2-4-4-4-4   0   0   95-100   90-100   1-0am, loam   A-2-4-4-4-4   0   0   95-100   90-100   1-0am, loam   A-2-4-4-4-4   0   0   95-100   90-100   1-0am, loam   A-2-4-4-4-4-4   0   0   95-100   90-100   1-0am, loam   A-2-4-4-4-4-4   0   0   0   95-100   1-0am, loam   A-2-4-4-4-4-4-4   0   0   0   0   0   0   0   0   0										
42-46   Fine Sandy   SC-SM, SM   A-4   0   0   90-100   85-100     10-am, sandy   10-am, sandy   10-am, sandy   10-am, fine sand   SM   A-2, A-3   0   0   90-100   85-100     11-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     12-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     13-15   Sand   SM   A-2, A-3   0   0   95-100   90-100     13-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-24   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-25   Sand   SM   A-3, A-3   0   0   95-100   90-100     15-26   Sand   SM   A-3, A-3   0   0   95-100   90-100     15-26   Sand   SM   A-3, A-3   0   0   95-100   90-100     15-27   Sand   SM   A-3, A-3   0   0   95-100   90-100     15-28   Sand   SM   A-3, A-3   0   0   95-100   90-100     15-29   Sand   SM   A-3, A-3   0   0   95-100   90-100     15-20   Sand   SM   A-3, A-3   0   0   95-100   90-100     15-20   Sand   SM   A-3, A-3   0   0   95-100   90-100     15-20   Sand   SM   A-3, A-3   0   0   95-100   90-100     15-20   Sand   SM   A-3, A-3   0   0   9			fine sand,							
10am, sandy   10am, sandy		77 - 67	Tine sand		K		c		0	7.0
46-60   Sand, fine sand   SM   A-2-4, A-3   0   0   90-100   85-100		0 H 1 H	loam gandy		f _G _	 	•			
ling       0-3       Sand, fine sand SM       A-2, A-3       0       0       90-100       85-100         ling       0-3       Sand       SM       A-2, A-3       0       0       95-100       90-100         ling       0-3       Sand       SM       A-2, A-3       0       0       95-100       90-100         ling			loam, loam							
ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     3-15     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     15-23     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling		46-60			-4, A-	0	0		85-100	55-70
ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       15-23     Sand     SM     A-2, A-3     0     0     95-100     90-100       15-23     Sand     SM     A-2, A-3     0     0     95-100     90-100       11mg     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       11mg     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       11mg     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       11mg     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       11mg     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       11mg     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       11mg     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       15-23     Sand     SM     A-2, A-3     0     0     95-100     90-100       15-23     Sand     SM     A-2, A-3     0 <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td>						_				
110g	399B:		7		,		c	, c	7	1
15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     23-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   95-100   90-100     15-24   Sand   SM   A-2, A-3   0   95-100   90-100     15-25   Sand   SM   A-2, A-3   0   95-100   90-100     15-26   Sand   SM   A-3, A-2   0   95-100   90-100     15-27   Sand   SM   A-3, A-2   0   95-100   90-100     15-28   Sand   SM   A-3, A-2   0   95-100   90-100     15-29   Sand   SM   A-3, A-2   0   95-100   90-100     15-20   Sand   SM   A-3, A-2   0   95-100   90-100     15-20   Sand   SM   A-3, A-2   0   95-100   90-100     15-20   Sand   SM   A-3, A-2   0   95-100   90-100     15-20   Sand   SM   A-3, A-2   0   95-100   90-100     15-20   Sand   SM   A-3, A-2   0   95-100   90-100     15-20   Sand   SM   A-3, A-2   0   95-100   90-100     15-20   Sand   SM   A-3, A-2   0   95-100   90-100     15-20   Sand   SM   A-3, A-2   0   95-100   90-100     15-20   Sand   SM   A-3, A-2   0   95-100   90-100     15-20   Sand   SM   A-3, A-2   0   95-100   90-100     15-20   Sand   SM   A-3, A-2   0   95-100   90-100     15-20   Sand   SM   A-3, A-3   0   95-100   90-100     15-20   Sand   SM   A-3, A-3   0   95-100   90-100     15-20   Sand   SM   A-3, A-3   0   95-100   90-100     15-20   Sand   SM   A-3, A-3   0   95-100   90-100     15-20   Sand   SM   A-3, A-3   0   95-100   90-100     15-20   Sand   SM   A-3, A-3   0   95-100   90-100     15-20   Sand   SM   A-3, A-3   0   95-100   90-100     15-20   Sand   SM   A-3, A-3   0   95-100   90-100     15-20   Sand   SM   A-3, A-3	Gray11119	2 - 0 - 1 - 1 - 1	Sand	E N			o c	93-T00	901-06	67-09
ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     3-15     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       ling     0-10		15-23	i cres	W.		o c	) c	95-100	90-100	60-75
ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       15-23     Sand     SM     A-2, A-3     0     0     95-100     90-100       23-60     Sand     SM     A-2, A-3     0     0     95-100     90-100       1ing     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       1ing     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       15-23     Sand     SM     A-2, A-3     0     0     95-100     90-100       15-23     Sand     SM     A-2, A-3     0     0     95-100     90-100       23-60     Sand     SM     A-2, A-3     0     0     95-100     90-100       23-60     Sand     SM     A-2, A-3     0     0     95-100     90-100		23-60	Sand	SM		0	0		90-100	60-75
ling     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       15-23     Sand     SM     A-2, A-3     0     0     95-100     90-100       15-23     Sand     SM     A-2, A-3     0     0     95-100     90-100       1ing     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       1ing     0-3     Sand     SM     A-2, A-3     0     0     95-100     90-100       15-23     Sand     SM     A-2, A-3     0     0     95-100     90-100       15-23     Sand     SM     A-2, A-3     0     0     95-100     90-100       15-23     Sand     SM     A-2, A-3     0     0     95-100     90-100       15-23     Sand     SM     A-2, A-3     0     0     95-100     90-100						_		_	_	
3-15   Sand   SM   A-2, A-3   0   0   95-100   90-100     3-15   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     23-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     23-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     23-60   Sand   SM   A-3, A-2   0   0   95-100   90-100     3-15   Sand   SM   A-3, A-2   0   0   95-100   90-100     3-16   Sand   SM   A-3, A-2   0   0   95-100   90-100     3-17   Sand   SM   A-3, A-2   0   0   95-100   90-100     3-18   Sand   SM   A-3, A-2   0   0   95-100   90-100     3-19   Sand   SM   A-3, A-2   0   0   95-100   90-100     3-10   Sand   SM   A-3, A-2   0   0   95-100   90-100     3-10   Sand   SM   A-3, A-2   0   0   95-100   90-100     3-10   Sand   SM   SM   A-3, A-2   0   0   95-100   90-100     3-19   Sand   SM   SM   SM   SM   SM   SM   SM   S	3990:						•			1
15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     23-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     23-60   Sand   SM   A-2, A-3   0   0   95-100   90-100     23-60   Sand   SM   A-3, A-2   0   0   95-100   90-100     23-60   Sand   SM   A-3, A-2   0   0   95-100   90-100     3-15   Sand   SM   A-3, A-2   0   0   95-100   90-100     3-16   Sand   SM   A-3, A-2   0   0   95-100   90-100     3-17   Sand   SM   SM   A-3, A-2   0   0   95-100   90-100     3-18   SAN	Grayıng	5 - 0 - 2	Sand	E S		o (	<b>o</b> (	95-T00	00T-06	00-75
13-23   Sand   SM   A-2, A-3   0   0   95-100   90-100      0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100      15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100      15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100      23-60   Sand   SM   A-3, A-2   0   0   95-100   90-100		3-T5	Sand	W.S.		o c	o c	95-100	90-100	67-09
1.1		101	מוווס	H C		 		0 0		1 0
11ng  0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     3-15   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     23-60   Sand   SM   A-3, A-2   0   0   95-100   90-100     23-60   Sand   SM   A-3, A-2   0   0   95-100   90-100		73-00	Sand	W.C.		 	>			0 / - 0 0
0-3   Sand   SM   A-2, A-3   0   0   95-100   90-100     3-15   Sand   SM   A-2, A-3   0   0   95-100   90-100     15-23   Sand   SM   A-2, A-3   0   0   95-100   90-100     23-60   Sand   SM   A-3, A-2   0   0   95-100   90-100	399D:									
Sand           R.           A-2, A-3         0         0         95-100         90-100             Sand           SM           A-2, A-3         0         0         95-100         90-100             Sand           SM           A-3, A-2         0         0         95-100         90-100	Grayling	0-3	Sand	SM		0	0	95-100	90-100	60-75
Sand  SM  A-2, A-3   0   0  95-100 90-100  Sand  SM  A-3, A-2   0   0  95-100 90-100		3-15	Sand	SM		0	0	95-100	90-100	60-75
Sand  SM  A-3, A-2   0   0  95-100 90-100		15-23	Sand	SM		0	0	95-100	90-100	60-75
		23-60	Sand	SM		0	0	95-100	90-100	60-75

Table 23. -- Engineering Index Properties -- Continued

Man avmbol	Denth	IISDA texture	Classification	ication	Fragments	nents	Per	Percentage pass	pass
and	454				>10	3-10	o 	0 0 0	100
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	u.				Pat	Pct			
405A:	и ч	, <u>, , , , , , , , , , , , , , , , , , </u>	E-Q	00 		c	001	00	
		4	4 4 —	o 4	 >	>	) )	 	
Cathro	0-28				0	0		100	1
	28-49	Loam, silty clay loam,	CL-ML, SC,	A-4, A-6	o	ر د - 0	80-100	001-69	0T-09
	:	sandy loam					-		,
	49-60	Sandy loam,	SC, CL,	A-4, A-6	0	0-2	80-100	65-100 60-10	60-10
		loam, loam							
Tawas	0-31	Muck	FA	8-8 8-8	0	0	100	100	;
	31-60	Fine sand,	SC-SM, SM,	A-2-4	0	0	_	70-100	65-90
_		loamy fine	SP-SM		_		_	_	
							_	_	
		sand, loamy							
406A: Loxley	0-13	Mucky peat	ЪТ	A-8	0	0	100	100	100
	13-60	Muck	PT	A-8	0	0	100	100	100
407A:	α -	<u>X</u>	- E-	O		c	00		001
ביים ביים ביים ביים ביים ביים ביים ביים	0	- Watch	다 보	o- <del>u</del>	 	>	0	 0 1	O O
Markey	0-32	Muck	PT SP SP SW	A - 8   A - 1   A - 1   A - 2   A - 3	0 0	0 0	100	100	
	1	١.	<u>.</u>			>		9	
		sand, gravelly   sand							
410A:									
Seelyeville	0-80	Muck	PT	A-8	0	0	100	100	100
Cathro	0-28				0	0		100	-
	28-49	Loam, silty	CL-ML, CL,	A-4, A-6	0	0-2	80-100	65-100	60-10
		sandy loam							
	49-60	Sandy loam, silty clay	SC, SC-SM,	A-4, A-6	0	0 - 5	80-100	80-100 65-100 60-10 	60-10
		loam, loam							
_	_	_	_	_	_		_	_	

Table 23. -- Engineering Index Properties -- Continued

			Classif	Classification	Fragments	ents	Per	Percentage	pass
Map symbol	Depth	USDA texture					<u></u>	sieve number-	mber-
and			ן היי היים היי היים	CHHOKK	>10	3-10	4	0	40
DUID II TOO			חודי	OTHOUS	TITOTICE	TITCHER	r	3	ř
	ų				Pct	Pot			
412A:		_		_	_			_	
Rifle	0 - 4	Peat	PT	A-8	0	0	100	100	-
	4-60	Mucky peat	PT	<b>A</b> - 8	o 	0	100	100	!
Tacoosh	0 - 8	Muck	PT	A-8	0	0	100	100	;
	8-40	Mucky peat	PT	A-8	0-5	0	100	100	-
_	40-42	Very fine sandy		A-4	0	0	85-100	75-100	45-95
_		loam. sandv		·					
		loam, loam							
	42-60		מאַ	A - K	·	c	0.0	001-37 001-38	45.05
	1 1 1	mont fine		F . G _	 	>	1	001	ו ט ט
		sandy loam,							
415A:									
Greenwood	09-0	Mucky peat	PT	A-8	0	0	100	100	-
439B:									
Graycalm	0-3		SM	A-2	0	0-5	95-100	80-100	40-75
	3-22	Sand, loamy	SM, SP-SM	A-2	0	0-2	95-100	95-100  80-100  40-75	40-75
						1			
	22-35	Sand, loamy	SM	A-2, A-3	o 	0-2	95-100	95-100 80-100	40-75
	25.60	sand Gtratified gand	Ž	K C - K		L.	001	001-00	40-00
		to loamy sand			 			 	)   
Menahga	0-1	Slightly	PT	A-8	0	0	100	100	:
		decomposed							
	,	plant material			_	•	1	-	
	T-Z		N. W.		o (	э (	00T-S6	00T-08	40-75
	2-25	Sand, Loamy	N.W	A-Z, A-3	o 	0	00T-56	001-58 001-56	د / <del>-</del> دد
	25-80	Sand, coarse	SM	A-2, A-3	0	0	95-100	95-100 85-100	55-70
		_			_		_		
43.90.									
Graycalm	0-3	Loamy sand	SM	A-2	0	0 - 5	95-100	95-100 80-100	40-75
	3-22	Sand, loamy	SP-SM, SM	A-2	0	0-5	95-100	95-100 80-100 40-75	40-75
_		sand		_	_				
	22-35	Sand, loamy	SM	A-2, A-3	0	0 - 5	95-100	95-100 80-100 40-75	40-75
		sand			_				
	35-60	Stratified sand SM	SM	A-2, A-3	0	0-5	95-100	95-100 80-100 40-80	40-80
		Zwo-							
-		-		_	-		-		

Table 23. -- Engineering Index Properties -- Continued

May a ceM	100 4	AUSII	Classification	ication	Fragi	Fragments	Per	Percentage pass	pass
and	400				>10	3-10	o 		
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	u.				Pot	Pct			
439C:	-		E						
Menanga	H	decomposed	1 4	o 4	- - —	> 	0	 	!
		plant material		_	_		_	_	
	1-2	Loamy sand	SM		0	0	95-100	80-100	40-75
	2-25	Sand, loamy	SM	A-2, A-3	0	0	95-100	95-100   85-100   55-75 	55-75
	25-80	Sand, coarse	SM	A-2, A-3	0	0	95-100 85-100		55-70
		sand							
439D:									
Graycalm	0-3	Loamy sand	SM	A-2	0	0-5	95-100	80-100	40-75
	3-22	Sand, loamy	SP-SM, SM	A-2	0	0-5	95-100	95-100   80-100   40-75	40-75
	22-35	Sand loams	M	A-2	c	ر ا	95-100	001-08	40-75
	000		# C		> 	0			)   
	35-60	υ.	SM	A-2, A-3	0	0-5	95-100	80-100	40-80
		to loamy sand							
Menahga	0-1	Slightly	PT	A-8	0	0	100	100	-
		decomposed plant material							
	1-2	Loamy sand	SM	A-2	0	0	95-100	95-100 80-100	40-75
	2-25	Sand, loamy	SM	A-2, A-3	0	0	95-100	95-100 85-100 55-75	55-75
	25-80	Sand, coarse	SM	A-2, A-3	0	0	95-100 85-100		55-70
		sand							
441C:				- —	_	_			
Freeon	0 - 4	Silt loam	CL-ML,	CL   A-4	0-2	0-5	90-100	85-100	80-10
	4-19	Silt loam	CL-ML,		0 - 2	2-0	00T-06	85-100	80-T0
	19-39	Sandy loam,	SM, SC, ML,	A-1, A-2, A-	4, _	0-7	60-100   50-90 		30-90
	39-53	Sandy loam.	SC-SM. ML.	A-1. A-2. A	A-4 0-5	0-7	60-100 50-90	20-90	30-90
		gravelly loam, fine sandy	•						
		loam			_			_	
	23-80	Sandy loam, gravelly fine sandy loam	SM, SC-SM	A-1, A-2	0-0	0-7	60-100	50-90	30-90
		_			_		_	_	

Table 23. -- Engineering Index Properties -- Continued

Mer Code		4 &GRIT	Classi	Classification	Fragments	nents	Per	Percentage pass	pass
and	, ,	- —			>10	3-10			
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	됩				Pct	Pct			
441C:									
Cathro	0-28	Muck	PT	A-8	0	0		100	-
	28-49	_	CL-ML, SC,	A-4, A-6	0	0-5	80-100	65-100   60-10	60-10
		clay loam,	CL, SC-SM						
	0	sandy loam			-	L			7
	49-60	Sandy Loam,		A-4, A-6	<b>o</b>	ر د - 0	00T-08	07-09 00T-69	0T-09
		loam loam	SC, SC-SM						
442C:									
Haugen	0 - 4	Sandy loam	SM, SC-SM	A-2-4, A-4	0-5	0-7	85-100 75-98		50-70
	4-15	Sandy loam,	SM, SC-SM	A-1, A-2, A-4	0-5	0-7	55-100 50-90		35-85
		gravelly sandy			_		_	_	
	_	loam, fine		_	_		_	_	
	_	sandy loam,		_	_		_	_	
	_	gravelly loam			_		_	_	
	15-23	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	0-5	0-7	22-100	20-90	35-75
	_	loam, sandy		_	_		_	_	
	_	loam, fine		_	_		_	_	
	_	sandy loam,		_	_		_	_	
		gravelly loam			_		_		
	23-35	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	0-5	0-7	55-100   50-90	20-90	35-75
	_	loam, sandy		_	_		_	_	
	_	loam, gravelly			_		_	_	
	_	fine sandy			_		_	_	
	_	loam			_		_	_	
	35-49	Sandy loam,	SC, SM	A-2, A-4, A-1	0-2	0-7	22-100	20-90	35-75
		gravelly sandy	_	_	_	_	_	_	
					_		_		
		sandy loam				_		_	
	49-79		SC, SC-SM	A-1, A-2	0-2	0-7	25-100	20-90	35-75
								-	
	79-80	Gravell	SC, SC-SM, SP	SM A-1, A-2, A-4	0-2	0-7	25-100	20-90	35-75
					_		_ :		
		sandy loam							
	•		E	0		-		-	00
dreemwood	יי פ פיים פיים	אר ממר לייליי	1 E	0 0		o c	0 0	000	1 F
			4 _	o 4	 	>	 -	 -	e H
	_	_	_		_		_	-	

Table 23. -- Engineering Index Properties -- Continued

	1		Classification	ication	Fragments	ents	Per	Percentage	pass
Map symbol	Depth	USDA texture			>10	3-10	<b>.</b>	sieve number-	ımber-
soil name			Unified	AASHTO	Ø	inches	4	10	40
	п				Pct	Pct			
443D:									
Amery	0-3	Sandy loam	SM, SC-SM		0-2	0-7	85-100 75-98		50-75
	3-22	sandy loam,   loam, gravellv	SM, SC-SM	A-2-4, A-4	0-0	/-0	00T-cc		c/-0c
-	22-34	Sandy loam,	SC-SM, SM	A-1-b, A-2-4,	0-5	2-0	55-100 50-90	20-90	35-75
_		fine sandy		A-4			_	_	
_		loam, gravelly			_		_	_	
		sandy loam		_			_	_	
	34-41	Gravelly sandy	SM, SC-SM	A-1-b, A-2-4,	0-5	0-7	55-100 50-90	20-90	35-75
_		loam, fine		A-4			_	_	
_		sandy loam,		_			_	_	
_		sandy loam		_	_		_	_	
_	41-57		SC, SM	A-2-4, A-4,	0-2	0-7	55-100 50-90	20-90	35-75
				A-1-b	_		_	_	
		sandy loam						-	
	57-71	Sandy loam,	SC, SM	A-2-4, A-4,	0-2	0-7	25-100	20-90	35-75
				A-1-b			_		
		sandy loam							
	71-80		SM, SC-SM	A-1-b, A-2-4,	0-2	0-7	55-100	20-90	35-75
		$\alpha$		A-4					
		sandy loam							
Greenwood	9-0	Peat	Td	8-8	0	0	100	100	100
_	09-9	Mucky peat	PT	A-8	0	0	100	100	100
461A:	α - C	7.5%	E-Q	α .	c	c	001	00	
7	38-47	Fine sand,	SM, SP-SM	A-2	0	0	100	100	85-95
		sand, loamy							
-							_	_	
	47-80	Muck	PT	A-8	0	0	100	100	-
484A:									
Greenwood	9-0	Peat	PT	A-8	0	0	100	100	100
	09-9	Mucky peat	PT	A-8	0	0	100	100	100
Beseman	0-36	Muck			0 0	0 (			1 7
_	36-60	n	CL-ML, SC-SM, A-4,	A-4, A-2-4	0	0-2	80-100	65-100	40-10
		loam, sandy	3						
_		_		_	_		_	-	

Table 23. -- Engineering Index Properties -- Continued

Man avend	Ted the	40211	TISDA + ACTION	   	lassif	Classification		Fragn	Fragments	Per	Percentage pass	pass
and	1 1 1	- —						>10	3-10	1		
soil name				Unified	ied	AASHTO	ľO	inches	inches	4	10	40
	In							Pct	Pct			
495B:												
Karlsborg	6-0	Loamy	sand	SM		A-2		0	0	95-100	95-100	70-75
	9-28	Sand,	loamy	SM		A-2		0	0	95-100	95-100   95-100   70-75	70-75
		sand						_		_		
	28-48	Clay		СН		A-7		0	0	100	100	85-10
	48-80	Sand		SM		A-2		0	0	100	100	50-70
Grettim	0 - 3	T.O.am	ผู	Z. C.	MS	A-2-4		c	c	90-100	85-100	60-80
	0 0	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	5		: 2		c	o c	, ,	0 0		2 0
	3-32	Sand,	Loamy		E S		A-3	o	>	00T-06		26-07
	32-75	מושמ כיים	1 Camir	מ כ	No.	- C - K	ر د - لا	_	c	001-00	25.100	70.05
	1	gand	Zimo i		i		1	· ·	•	) H		
	75-80	Sand		SM		A-2-4, i	A-3	0	0	90-100	85-100	55-75
Perida	6-0		sand	SM		A-2		0	0		80-100	60-75
	9-43	Sand,	loamy	SM		A-2		0	0	90-100	80-100	60-75
		sand,	fine									
_		sand										
	43-45	Loamy	sand,	SM		A-2		0	0	90-100	80-100	60-75
		sand,	fine					_		_		
	_	sand		_				_				
	45-60	Clay,	silty	СН		A-7		0	0	100	100	90-10
		clay										
	60-74	Silty	clay,	CH		A-7		0	0	100	100	90-10
	74-80	Glay		Z		A-2-4	۸ - ۲	c	c	90-100	25-100	75-75
		5		:		· ·		,	•	) 	H	)
495C:												
Karlsborg	6-0	Loamy	sand	SM		A-2		0	0		95-100	70-75
	9-28	Sand,	loamy	SM		A-2		0	0	95-100	95-100	70-75
		sand							•			ı
_	28-48	Clay		CH		A-7		0	0	T00	T 0 0	85-IO
	48-80	Sand		SM		A-2		0	0	100	100	50-70
Grettum	0-3	Loamy	sand	SM, SC-SM		A-2-4		0	0	90-100	85-100	60-80
	3-32	Sand	loamv	SM. SC-SM		A-2-4	A-3	0	0			70-95
	· ·	sand	7				) !	,	,			)
	32-75	Sand,	loamy	SC-SM,	SM	A-2-4,	A-3	0	0	90-100	85-100	70-95
		sand	ı									
	75-80	Sand		SM		A-2-4,	A-3	0	0	90-100	90-100 85-100 55-75	55-75
	_	_		_				_				

Table 23. -- Engineering Index Properties -- Continued

Map symbol	Depth	USDA	texture		Classification	cation	Fragn	Fragments	Pe	Percentage pas	pas
and	1 1 1						>10	3-10			
soil name				Unj	Unified	AASHTO	inches	inches inches	4	10	40
	r I						Pct	Pct			
495C:											
Perida	6-0	Loamy	sand	SM		A-2	0	0	90-100	90-100 80-100	60-7
_	9-43	Sand,	loamy	SM	_	A-2	• •	0	90-100	90-100   80-100   60-7	60-7
		sand,	fine								
		sand	,	_ ;		(		,			
	43-45	Loamy	UĮ.	WS.		A-2	o 	0	00T-06	00T-08	7-09
		sand,	tine								
		sand									
	45-60	clay,	silty	뜽		A-7	0	0	100	100	90-1
		CIAY	-					c	6	6	,
	# - 00	2117	CIAY,	5		/ - W	> 	>	) 	0	7 - O C
	2	CLay		2			-	c	-	- C	D
	74-80	Sand		E .		A-Z-4, A-3	>	>	00T-06		7-00
495D:											
Karlsborg	6-0	Loamy	sand	SM		A-2	0	0	95-100	95-100	70-7
	9-28	Sand,	loamy	SM		A-2	0	0	95-100	95-100  95-100  70-7	70-7
		sand	İ								
	28-48	Clay		CH		A-7	0	0	100	100	85-1
	48-80	Sand		SM		A-2	0	0	100	100	50-7
		_					_				
Grettum	0-3	Loamy	sand	SM, SC		A-2-4	0	0	90-100		8-09
-	3-32	Sand,	loamy	SM, SC	SC-SM	A-2-4, A-3	0	0	90-100	85-100   70-9	70-9
		sand			_		_				
	32-75	Sand,	loamy	SM, SO	SC-SM	A-2-4, A-3	0	0	90-100	85-100 70-9	70-9
	75-80	Sand		SM		A-2-4, A-3	0	0	90-100	85-100	55-7
:		_ !		_ :		(		•			,
Perida	6 - O	Loamy	sand	SM		A-2	0	0	00T-06		7-09
	9-43	Sand,	_	SM		A-2	0	0	001-06	80-100   60-7	60-7
		sand,	fine								
	:	Direct Control					-	,	,	,	
	43-45	Loamy	sand, fine	SW _		A-2	0	0	90-100	80-100	60-7
		sand									
	45-60	clay,	silty	픙		A-7	0	0	100	100	90-1
_		clay		_			_				
	60-74	Silty	clay,	E		A-7	0	0	100	100	90-1
		clay				•		·		L	I L
	74-80	sana		E		A-Z-4, A-3	> 	>	00T - 06	/-cc nnt-c8 nnt-n6	7-00
_		_		_	_		_			_	-

Table 23. -- Engineering Index Properties--Continued

			Classif	Classification	Fragi	Fragments	Per	Percentage pass	pass
Map symbol	Depth	USDA texture		-			u <sub>1</sub>	sieve number-	mber-
and			177. 6.00	CHASK	×10	>10 3-10	4	0	40
SOIT Hame			OHITTEG	AASHIO	TUCHES	Tuches	r	TOT	11
	п				Pct	Pct			
4978:									
Meenon	6-0	Loamy sand	SM	A-2	0	0	80-100	80-100 75-100 45-75	45-75
	9-28	Sand, loamy	SM	A-3	0	0	80-100	80-100   75-100   35-75	35-75
	28-41	Clay	CH	A-7	0	0	97-100	97-100 95-100 80-10	80-10
	41-80	Sand, fine	SM	A-3	0	0	97-100	97-100 95-100 60-70	60-70
		sand, loamy		_					
		fine sand							
5158:									
Manitowish	0-3	Sandy loam	SM	A-4	0	0-15	80-100	80-100 75-100	50-85
-	3 - 4	Meo L	מט-טא	A-2-4 A-4	c	0 1 1	55-100		25.05
	# 1	loam gravelly			> 	1	1		)     
		fine sandv							
		loam							
	4-16	Sandy loam,	SC-SM, SM	A-2-4, A-4	0	0-15	55-100	55-100   50-100   35-95	35-95
		loam, gravelly		_					
		fine sandy		_					
_		loam		_	_				
_	16-19	Loamy coarse	GC-GM, GM,	A-1, A-2, A-3	0	0-15	45-100 40-95	40-95	20-70
_		sand, gravelly	SC-SM, SM	_	_		_		
_		loamy sand,		_	_				
_		sand		_	_				
_	19-60	Stratified sand SP,	SP, GP-GM,	A-1, A-2, A-3	0	0-15	45-100 40-95	40-95	15-65
_		to very	GP, SP-SM	_	_				
_		gravelly		_	_				
		coarse sand			_			_	
_		_		_	_		_	_	

Table 23. -- Engineering Index Properties -- Continued

			Classi	Classification	Fragments	ents	Per	Percentage	pass
Map symbol	Depth	USDA texture					O2	sieve number-	mber-
and soil name			Unified	AASHTO	>10  inches	3-10 inches	4	10	40
	H.				Pot	Pct			
521A:									
Dody	0-3	Muck	PT	A-8	0	0	100	100	
	3-9	Sand, loamy	SM, SC-SM	A-2-4, A-3	0	0	100	98-100	65-75
		fine sand							
	9-20	Fine sand,	SP-SM, SM,	A-2-4	0	0	100	98-100	85-95
		sand, loamy			_	-			
		fine sand		. —	_				
	20-23	Loamy sand,	SM, SC-SM	A-2-4	0	0	100	98-100	65-80
		sand, loamy		_	_	_	_	_	
		fine sand,			_		_		
	23-47	Clay, silty	СН	A-7	0	0	100	98-100	80-10
	T .							0	<u> </u>
	4/-58	Loamy sand,	SC-SM, SM	A-2-4	 -	>	001	98-T00	02-80
		U							
		fine sand,							
	28.0	Ine sand	SC-SW SW	A-2-4	c	c	100	98-100	65-80
		1		-	 >	>	2	9	
		sand, loamy							
		fine sand							
524E:									
Rock outcrop.									
Frogcreek	0 - 4	Silt loam	CL-ML, ML	A-4	0-2	0-5	90-100	90-100 85-100	80-10
	4-13	Silt loam, silt	CL-ML, ML	A-4	0-2	0-5	90-100	90-100 85-100	80-10
	13-19	Silt loam,	SM, SC	A-1-b, A-2-4	0-5	0-7	60-100 50-90		30-90
		loam, sandy		_	_	_			
		loam, gravelly			_	_	_		
		sandy loam							
	19-32		SM, SC	A-1-b, A-2-4	0-2	0-7	001-09	20-90	30-80
		sandy Toam							
	32-46	Gravelly sandy	SM, SC	A-1-b, A-2-4	0-2	0-7	60-100   50-90 	20-90	30-80
	46-80	$\neg$	SC-SM, SM,	A-1, A-2-4	0-5	0-7	60-100 50-90	20-90	25-70
		sand, loamy	SP-SM	. —	_	_		_	
_		sand		_	_				
_		_		_	_		_	_	

Table 23. -- Engineering Index Properties -- Continued

				•					
Codumba	100 T		Classif	Classification	Fragments	ents	Per	Percentage pass	pass
and and	เมาต้อน	ospa cexture			>10	3-10	ni 	D > D	- TACIIII
soil name			Unified	AASHTO	Ø	inches	4	10	40
	u				Pot	Pct			
524E:	c	1	Į,	, , , , , , , , , , , , , , , , , , ,	c	1	00	0	5
me conga	3 - 3		sandy MI, CL-MI,	A - 4	0 0	0-7	95-100   90-100	001-06	65-10
		, sil	SC-SM, SM					_	
	4-25	Samay loam  Verv fine sandv	CL-ML, ML,	A-4	0	0-7	95-100 90-100	90-100	65-10
	1	loam, silt		! !	,				
			•		_				
_		sandy loam		_	_		_	_	
_	25-28	Sandy loam,	SM	A-1-b, A-2-4	0	0-15	25-95	20-90	30-75
	0 0 0	Thweathered	;	;					
		bedrock							
542B:									
Haugen, very									
stony	0 - 4	Sandy loam	SM, SC-SM	A-2-4, A-4	0-5	0-7	85-100 75-98	75-98	50-70
	4-15	Sandy loam,	SC-SM, SM	A-1, A-2, A-4	0-5	0-7	55-100 50-90	20-90	35-85
		gravelly sandy							
		gravelly loam					_	_	
_	15-23	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	0 - 5	0-7	55-100 50-90	20-90	35-75
_		loam, sandy			_		_	_	
		sandy loam,							
	23-35	Gravelly sandy	SM, SC-SM	A-1, A-2, A-4	0-5	0-7	55-100   50-90		35-75
		loam, sandy			_			_	
_		loam, gravelly			_		_		
		fine sandy							
	, ,	Loam		,					L C
	50 14 12	sandy loam,	SC, SM	A-2, A-4, A-1	n - -	/-0	001-66	06-00	35-75
		Joam fine							
_									
	49-79		SC, SC-SM	A-1, A-2	0-5	0-7	55-100	20-90	35-75
_		loam, sandy			_			_	
_					_		_		
		sandy loam			_		_	_	
	79-80	_	SC-SM, SM, SC	SC A-1, A-2, A-4	0-5	0-7	55-100 50-90	20-90	35-75
		Loam, Ilne							
_		_		_	_		_	_	

Table 23. -- Engineering Index Properties -- Continued

			Classification	ication	Frag	Fragments	Per	Percentage pass	pass
Map symbol	Depth	USDA texture					Ø	sieve number-	mber-
and	_	_	_	_	>10	3-10			
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	u.				Pct	Pct			
542B:									
Haugen	0-7	Sandy loam	SM, SC-SM	A-2-4, A-4	0 - 5	0-7	85-100 75-98	75-98	50-70
	7-15	Sandy loam,	SM, SC-SM	A-1, A-2, A-4	-4 0-5	0-7	55-100 50-90	20-90	35-85
		gravelly sandy			_	_	_		
	_	loam, fine	_		_	_	_		
	_	sandy loam,	_	_	_	_	_		
	_	gravelly loam	_	_	_	_	_		
	15-23	Gravelly sandy	SM, SC-SM	A-1, A-2, A-4	-4 0-5	0-7	55-100 50-90	20-90	35-75
		loam, sandy			_		_		
	_	loam, fine			_	_	_		
	_	sandy loam,			_	_	_		
	_	gravelly loam	_	_	_	_	_		
	23-35	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	-4 0-5	0-7	55-100 50-90	20-90	35-75
		loam, sandy			_	_	_		
		loam, gravelly			_	_	_		
		fine sandy			_	_	_		
	_	loam		_	_	_	_		
	35-49	Sandy loam,	SC, SM	A-2, A-4, A-1	-1 0-5	0-7	55-100 50-90	20-90	35-75
		gravelly sandy			_	_	_		
		loam, fine			_	_	_		
		sandy loam			_	_	_		
	49-79	Gravelly sandy	SC, SC-SM	A-1, A-2	0 - 5	0-7	55-100 50-90	20-90	35-75
	_	loam, sandy			_	_	_		
	_	loam, fine			_	_	_		
		sandy loam			_	_	_		
	79-80	Gravelly sandy	SC, SM, SC-SM A-1, A-2, A-4	A-1, A-2, A	-4 0-5	0-7	55-100 50-90	20-90	35-75
		loam, sandy			_		_		
		loam, fine			_	_	_		
	_	sandy loam			_	_	_		
_	_	_			_	_	_		

Table 23. -- Engineering Index Properties--Continued

			Classification	ication	Fragn	Fragments	Per	Percentage pass	pass
Map symbol	Depth	USDA texture					roi	sieve number-	mber-
and				_	>10	3-10			
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	п				Pct	Pct			
542C:									
Haugen, very					_		_		
stony	0 - 4	Sandy loam	SC-SM, SM	A-2-4, A-4	0 - 5	0-7	85-100 75-98	75-98	50-70
	4-15	Sandy loam,	SM, SC-SM	A-1, A-2, A-4	_	0-7	55-100 50-90	20-90	35-85
		gravelly sandy			_		_	_	
		loam, fine		_	_		_	_	
		sandy loam,		_	_		_	_	
		gravelly loam		_	_		_	_	
	15-23	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	0 - 5	0-7	55-100 50-90	20-90	35-75
		loam, sandy		_			_		
		loam, fine		_			_		
		sandy loam,							
		gravelly loam			_		_		
	23-35	Gravelly sandy	SM, SC-SM	A-1, A-2, A-4	0 - 5	0-7	55-100 50-90	20-90	35-75
		loam, sandy		_	_		_	_	
		loam, gravelly		_	_		_	_	
		fine sandy		_	_		_	_	
		loam		_	_		_	_	
	35-49	Sandy loam,	SM, SC	A-2, A-4, A-1	0 - 5	0-7	55-100 50-90	20-90	35-75
		gravelly sandy			_		_	_	
		loam, fine			_		_	_	
		sandy loam		_	_		_		
	49-79	Gravelly sandy	SC, SC-SM	A-1, A-2	0 - 5	0-7	55-100   50-90	20-90	35-75
		דייין דיייי							
	0	sandy Loam	שני ביט ביט אנט ביט	, ,	<u></u>	1	00	0	7 7 7 5
	00-6/	-	SC, SM, SC-SM	F-W' 2C-2W W-T' W-Z' W-F-		\ - -	001-00	00-00	07-00
		loam, fine							
		sandy loam			_		_	_	
				_	_		_	_	

Table 23. -- Engineering Index Properties -- Continued

Lodmy a neW	100 + to 4	4 AUST	Classif	Classification	Fragments	nents	Per	Percentage pass	pass
	4				>10	3-10	i 	) )	100
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	uI				Pct	Pct			
542C:									
Haugen	0-7	Sandy loam	SM, SC-SM	A-2-4, A-4	0-5	0-7	85-100 75-98	75-98	50-70
	CT-/	gravelly sandy	SM, SC-SM	F-W '7-W 'T-W			001-00	000	0 0 0 0 0
		loam, fine		- —	_		- —		
_		sandy loam,		_	_		_	_	
		gravelly loam		_	_		_	_	
	15-23	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	0-5	0-7	25-100	20-90	35-75
-									
_									
		sandy loam,					_		
		gravelly loam					_		
	23-35	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	0 - 5	0-7	22-100	20-90	35-75
		loam, sandy			_		_	_	
		loam, gravelly					_		
		fine sandy			_				
_		loam							
	35-49	Sandy loam,	SC, SM	A-2, A-4, A-1	0-5	0-7	55-100 50-90	20-90	35-75
		gravelly sandy							
		loam, fine							
	0	Salidy Loalii			ı		C C T		L
	49-19	Gravelly sandy	SC-SM, SC	A-1, A-2	o-0	/-0	06-05 00T-55	06-06	35-75
_	79-80	v sandv	SM. SC-SM. SC	SC 2-1 A-2 A-4	0 - 5	0-7	55-100 50-90	20-90	35-75
				-	)			 )	)
		sandy loam		_	_		_		
123B									
Anidon	0-10	Silt loam	CL, CL-ML	A-4	0	0-7	95-100	90-100	80-10
	10-14	Silt loam, silt  CL,		A-4	0	0-7	95-100 90-100	001-06	80-10
	14-20	loam	당	A-4, A-6	0	0-7	95-100 90-100	90-100	
	20-30	Silt loam			0	0-7	95-100 90-100	90-100	
_	30-34	Sandy loam		A-1. A-2.		0-7	50-100	45-100	30-90
_	0	loam grayfelly	)	A-4 A-6	· -				
				O - G / F - G -					
	34-60	Stratified sand GP,	GP, GP-GM,	A-1, A-2, A-3	0	0-7	45-100 40-95	40-95	15-65
-			•						
-		gravelly							
		coarse sand							
-							_		
-		-		_	_		-	-	

Table 23. -- Engineering Index Properties -- Continued

Unified   AASHTO   inches	soil name soil soil soil		USDA texture			Fragments	ופזורם		rercentage pass sieve number-	B Pabe
1 name   In	ન	1 1 1				>10	3-10			
In   Pet   Pet	543C2: Anigon			Unified	AASHTO	inches	inches	41	10	40
D-10   Silt loam   CL-ML, CL   A-4   0   0-7     10-14   Silt loam, silt   ML, CL-ML, CL   A-4   A-6   0   0-7     10-14   Silt loam, silt   ML, CL-ML, CL   A-4   A-6   0   0-7     10-20   Silt loam   ML, CL   A-4   A-6   0   0-7     10-30   Silt loam   ML, CL   A-4   A-6   0   0-7     10-30   Silt loam   ML, CL   A-4   A-6   0   0-7     10-30   Silt loam   ML, CL   A-4   A-6   0   0-7     10-30   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-7     10-30   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-7     10-30   Stratified sand   SM   SP-SM   A-2, A-3   0   0-3     10-30   Sand, loamy   SM   A-2, A-3   0   0-3     10-30   Sand, loamy   SM   A-2, A-3   0   0-3     10-30   Sand, coarse   SM, SP-SM   A-1, A-2, A-3   0   0-3     10-30   Sand, gravelly   SM   SP-SM   A-1, A-2, A-3   0   0-15     10-30   Sand, gravelly   SM   SP-SM   A-1, A-2, A-3   0   0-15     10-30   Sand, gravelly   Sm   SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-40   Sand, coarse sand, Gravelly   Sm   SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Gravelly sand, SM, SP-SM   A-1, A-2, A-3	543C2: Anigon	ц				Pat	Pct			
10-10   Silt loam   CL-ML, CL A-4   A-6   0   0-7     10-14   Silt loam, silt   ML, CL-ML, CL A-4   A-6   0   0-7     14-20   Silt loam   CL, ML   A-4, A-6   0   0-7     20-30   Silt loam   CL, ML   A-4, A-6   0   0-7     10-30   Silt loam   ML, CL ML   A-4, A-6   0   0-7     10-30   Silt loam   ML, CL ML   A-4, A-6   0   0-7     10-30   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-7     10-30   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-7     10-30   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-7     10-30   Sand, loamy   SM   A-2, A-3   0   0-3     10-30   Sand, coarse   SM, SP-SM   A-2, A-3   0   0-3     10-30   Sand, coarse   SM, SP-SM   A-1, A-2, A-3   0   0-15     10-30   Sand, coarse   SM, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SMB, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SMB, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SMB, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SMB, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SMB, SP-SM   A-1, A-2, A-3   0   0-15     11-30   Gravelly   Smd, SMB, S	Anigon									
14-20   5ilt loam, silt   ML, CL-ML, CL   A-4   0   0-7     20-30   5ilt loam   CL, ML   A-4, A-6   0   0-7     20-30   5ilt loam   CL, ML   A-4, A-6   0   0-7     30-34   Sandy loam,   SC   A-1, A-2,   0   0-7     10-am, gravelly   A-4, A-6   0   0-7     10-am, gravelly   A-4, A-6   0   0-7     10-am, gravelly   A-4, A-6   0   0-7     10-am, gravelly   A-4, A-6   0   0-7     10-am, gravelly   A-4, A-6   0   0-7     10-am, gravelly   A-4, A-6   0   0-7     10-am, gravelly   A-4, A-6   0   0-7     10-am, gravelly   A-2, A-3   0   0     10-am, gravelly   A-2, A-3   0   0     10-am, gravelly   B-7   A-2, A-3   0   0     10-am, gravelly   B-7   A-2, A-3   0   0-3     10-am, gravelly   B-7   A-2, A-3   0   0-3     10-am, gravelly   B-7   A-2, A-3   0   0-3     10-am, gravelly   B-7   A-2, A-3   0   0-15     10-am, gravelly   B-7   A-1, A-2, A-3   0   0-15     10-am, grav	_	0-10	loam	Æ, CL	A-4	0	0-7	95-100	90-100	80-10
14-20   Silt loam   CL, ML   A-4, A-6   0   0-7     20-30   Silt loam   ML, CL   A-4, A-6   0   0-7     10-am, gravelly   SC   A-4, A-6   0   0-7     10-am, gravelly   A-4, A-6   0   0-7     10-am, gravelly   A-1, A-2, A-3   0   0-7     10-am, gravelly   A-1, A-2, A-3   0   0-7     10-am, gravelly   A-1, A-2, A-3   0   0-7     10-am, gravelly   A-1, A-2, A-3   0   0-7     10-am, gravelly   A-2, A-3   0   0-7     10-am, gravelly   SM   A-2, A-3   0   0-3     10-am, gravelly   SM   A-2, A-3   0   0-3     10-am, gravelly   SM   SP-SM   A-2, A-3   0   0-3     10-am, gravelly   SM   SP-SM   A-1, A-2, A-3   0   0-3     10-am, gravelly   Sm   SP-SM   A-1, A-2, A-3   0   0-15     10-am, gravelly   Sm   SP-SM   A-1, A-2, A-3   0   0-15     10-am, gravelly   Sm   Sm   SP-SM   A-1, A-2, A-3   0   0-15     10-am, gravelly   Sm   Sm   SP-SM   A-1, A-2, A-3   0   0-15     10-am, gravelly   Sm   Sm   Sm   Sm   Sm   Sm   Sm   S		10-14		CL-ML,	A-4	0	0-7	95-100	90-100	80-10
20-30   Silt loam   ML, CL   A-4, A-6   0   0-7     30-34   Sandy loam,   SC   A-1, A-2,   0   0-7     10-am   34-6   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-7     10-am   34-6   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-7     10-am   Singhtly   PT   A-8   0   0-7     10-am   Sand   Sm   A-2, A-3   0   0     10-am   Sand   Coarse   SM   A-2, A-3   0   0-3     10-am   Sand   Coarse   SM, SP-SM   A-2, A-3   0   0-3     10-am   Sand   SC-SM, SM   A-2, A-3   0   0-3     10-am   Sand   Coarse   SM, SP-SM   A-1, A-2, A-3   0   0-15     10-am   Sand   Sm   Sm   Sm   Sm   Sm   Sm   Sm   S	_	14-20	Silt loam		A-4, A-6	0	0-7	95-100	95-100   90-100   80-10	80-10
30-34   Sandy loam,   SC   A-1, A-2,   0   0-7	_	20-30	Silt loam		A-4, A-6	0	0-7	95-100	90-100	80-10
loam, gravelly   A-4, A-6     state   loam   SP-SM, SP,   A-1, A-2, A-3   0   0-7     to very   GP-GM, GP   A-1, A-2, A-3   0   0-7     coarse sand	_	30-34	Sandy loam,	30	A-1, A-2,	0	0-7	50-100	50-100 45-100	30-90
10am	_				A-4, A-6	_		_		_
34-60   Stratified sand   SP-SM, SP,   A-1, A-2, A-3   0   0-7			loam			_				_
Lovery GP-GM, GP   GP-GM, GP   GP-GM, GP   Gravelly   Gravelly   Gravelly   Goarse sand   Gecomposed   Geco	_	34-60			A-1, A-2, A-		0-7	45-100	40-95	15-65
Gravelly   PT   A-8   O   O	_		to very			_		_	_	_
hga	_		gravelly			_		_	_	_
hga			coarse sand							
Singhtly   PT   A-8   0   0     decomposed	544F:									
decomposed   plant material	Menahga	0-1	Slightly	PT	A-8	0	0	100	100	
1-2   Sand   SM   A-2, A-3   0   0   0     2-25   Sand, loamy   SM   A-2, A-3   0   0   0     2-58   Sand, coarse   SM   A-2, A-3   0   0   0     25-80   Sand, coarse   SM   SP-SM   A-2, A-3   0   0-3     5-8   Sand, coarse   SM, SP-SM   A-2, A-3   0   0-3     8-15   Gravelly   Sand, coarse   SM, SP-SM   A-1   0   0-15     8-15   Gravelly   Sand, coarse   SM, SP-SM   A-1   A-2, A-3   0   0-15     15-30   Gravelly sand, sand   SM, SP-SM   A-1, A-2, A-3   0   0-15     15-30   Gravelly sand, sand   SM, SP-SM   A-1, A-2, A-3   0   0-15     15-30   Gravelly sand, sand sand sand sand sand sa			decomposed							
1-2   Sand   SM   A-2, A-3   0   0     2-25   Sand, loamy   SM   A-2, A-3   0   0     sand   Sand, coarse   SM   A-2, A-3   0   0     sand   Sc-SM, SM   A-2, A-3   0   0     sand   Sc-SM, SM   A-2, A-3   0   0-3     sand, loamy   Sand, coarse   SM, SP-SM   A-1   0   0-15     sand, coarse   SM, SP-SM   A-1   0   0-15     sand, coarse   SM, SP-SM   A-1   0   0-15     sand, sand   Sand, Sand   Sand, sand   Sand, sand   Sm, SP-SM   A-1, A-2, A-3   0   0-15     sand, sand   Sm, SP-SM   A-1, A-2, A-3   0   0-15     sand   sand   Sm, SP-SM   A-1, A-2, A-3   0   0-15     coarse sand   Sm, SP-SM   A-2, A-3, A-1   0			plant material			_				_
2-25   Sand, loamy   SM   A-2, A-3   0   0      Sand, coarse   SM   A-2, A-3   0   0      S-8   Sand, coarse   SM, SP-SM   A-2, A-3   0   0-3      S-8   Sand, coarse   SM, SP-SM   A-2, A-3   0   0-3      S-8   Sand, loamy   A-2, A-3   0   0-3      S-8   Sand, coarse   SM, SP-SM   A-1   0   0-15      S-8   Sand, coarse   SM, SP-SM   A-1   0   0-15      Sand, coarse   SM, SP-SM   A-1   0   0-15      Sand, gand   SM, SP-SM   A-1, A-2, A-3   0   0-15      Sand   Sand, sand   SM, SP-SM   A-2, A-3, A-1   0   0-15	_	1-2	Sand	SM		0	0	95-100	85-100	
Sand, coarse   SM   A-2, A-3   0   0       0-5   Loamy sand   SC-SM, SM   A-2, A-3   0   0-3       5-8   Sand, coarse   SM, SP-SM   A-1, A-2, A-3   0   0-3       5-8   Sand, coarse   SM, SP-SM   A-1   0   0-15       15-30   Gravelly   Sand, coarse sand,	_	2-25		SM		0	0	95-100	85-100	55-75
25-80   Sand, coarse   SM   A-2, A-3   0   0      0-5   Loamy sand   SC-SM, SM   A-2   A-3   0   0     5-8   Sand, coarse   SM, SP-SM   A-2, A-3   0   0-3     coarse sand   Caarse Sand   A-1   0   0-15     sand, coarse   SM, SP-SM   A-1   0   0-15     sand, coarse sand   SM, SP-SM   A-1, A-2, A-3   0   0-15     sand, sand   SM, SP-SM   A-1, A-2, A-3   0   0-15     coarse sand,   Sm, SP-SM   A-2, A-3, A-1   0   0-15     coarse sand,   Sm, SP-SM   A-2, A-3, A-1   0   0-15     coarse sand,   Sm, SP-SM   A-2, A-3, A-1   0   0-15     coarse sand,   Caa	_		sand			_		_	_	
Sand   SC-SM, SM   A-2   0   0-3     5-8   Sand, coarse   SM, SP-SM   A-2, A-3   0   0-3     coarse sand   Coarse   SM, SP-SM   A-1   0   0-15     sand, coarse   SM, SP-SM   A-1   0   0-15     sand, coarse   SM, SP-SM   A-1   0   0-15     sand, sand   SM, SP-SM   A-1, A-2, A-3   0   0-15     coarse sand,   SM, SP-SM   A-1, A-2, A-3   0   0-15     coarse sand,   SM, SP-SM   A-2, A-3, A-1   0   0-15     coarse sand,   Coarse sand,   Coarse sand	_	25-80		SM		0	0	95-100	95-100 85-100	55-70
5-8   Sand, coarse   SM, SP-SM   A-2   0   0-3     5-8   Sand, coarse   SM, SP-SM   A-2, A-3   0   0-3     sand, loamy   Coarse sand   Coarse sand   Sand, coarse   SM, SP-SM   A-1   0   0-15     sand, coarse   SM, SP-SM   A-1   0   0-15     sand, gravelly   Sand, sand   SM, SP-SM   A-1, A-2, A-3   0   0-15     sand   Sand   SM, SP-SM   A-1, A-2, A-3   0   0-15     sand   Sand   SM, SP-SM   A-1, A-2, A-3   0   0-15     coarse sand   SM, SP-SM   A-2, A-3, A-1   0   0-15     coarse sand   Coarse sand			sand							
Sand, coarse   SM, SP-SM   A-2, A-3   0   0-3   85-100     sand, loamy	Mahtomedi	0 - 5	Loamy sand		A-2	0	0-3	85-100	85-100   75-100   40-75	40-75
Sand, loamy   Coarse sand   A-1   0   0-15   60-95     Sand, coarse   SM, SP-SM   A-1   0   0-15   60-95     Sand, gravelly   Sand   A-1, A-2, A-3   0   0-15   60-95     Sand   Sand   SM, SP-SM   A-1, A-2, A-3   0   0-15   60-95     Sand   Gravelly sand,   SM, SP-SM   A-2, A-3, A-1   0   0-15   55-95     Coarse and   Coarse an	_	2-8	-	SM, SP-SM		0	0-3	85-100	75-100	35-75
Gravelly coarse sand   A-1   0   0-15   60-95     Sand, Coarse   A-1   0   0-15   60-95     Sand, Gravelly			sand, loamy							
Gravelly coarse   M, SP-SM   A-1   0   0-15   60-95     sand, coarse		,	coarse sand				,	- :		
Sand, gravelly		8-15	Gravelly coarse	SM,	B-1	0	0-15	60-95	20-90	25-65
sand, gravelly										
Gravelly sand,   SM, SP-SM   A-1, A-2, A-3   0   0-15   60-95     coarse sand,										
coarse sand,       SM, SP-SM       A-2, A-3, A-1       0       0-15       55-95		15-30	Gravelly sand,		A-2,		0-15	60-95	50-90	25-65
Sand Gravelly sand, SM, SP-SM A-2, A-3, A-1 0 0-15 55-95 Coarse and	_		coarse sand,							
Gravelly sand, SM, SP-SM   A-2, A-3, A-1   0   0-15   55-95										
		30-60	Gravelly sand,		A-2, A-3, A-		0-15	55-95	50-90	25-65
			coarse sand			_				

Table 23. -- Engineering Index Properties -- Continued

					Classification	icatio	g	-	Fragments	nts	Per	Percentage pass	Dass
Map symbol	Depth	USDA texture	ture				ļ.		) 	}	י מ	sieve number-	mber-
and								_	>10	3-10			
soil name				Uni	Unified	A	AASHTO	ri	inches	inches	4	10	40
	п								Pct 	Pct			
555A:													
Fordum	9-0	Silt loam		CL, ML,		CL-ML A-4,	A-6	_	0	0-7	80-100	75-100	70-10
	6-18	Silt loam,	, fine SM,	SM, ML,	, CL,	A-1,	A-2,	A-4		0-15	60-100	60-100   50-100   35-10	35-10
			dill',	מ									
		mucky sa	sandy										
_			gravelly										
		loam						_	_				
	18-30	Fine sandy	<u> </u>	CL, SM,	, sc,	A-1,	A-2,	A-4	_ o	0-15	001-09	60-100   50-100   30-10	30-10
_		loam, silt	1t	ML		_		_	_	_	_	_	
_		loam, mu	mucky			_		_	_	_		_	
		sandy loam,	am,										
		gravelly loam	loam			_		_	_				
-	30-60	Sand, very	>	SP, GP,		A-1,	A-2, A	A-3	0	0-15	30-100 25-100	25-100	7-95
		gravelly loamy	loamy		, SM				_	-			
		fine sand,	d,					_	_				
		gravelly							_				
		coarse sand,	and.			_		_	_				
		fine and	) 7										
574B:											_		
Sayner	0-2	Loamy sand	ص ت	SM		A-1		_	_ o	0-15	85-100	85-100 75-100 45-75	45-75
_	2-4	Loamy sand,	ď,	SP-SM,	SM	A-1		_	0	0-15	85-100	75-100	40-75
		sand	_			_		_	_	_	_	_	
_	4-7	Loamy sand,	ď,	SP-SM,	SM	A-1,	A-3	_	0	0-15	70-100   50-100	50-100	25-75
_		sand, gr	gravelly			_		_	_	_	_	_	
		-	sand,			_		_	_	_	_	_	
_		loamy co	coarse			_		_	_	_		_	
_		sand	_			_		_	_	_	_	_	
	7-14	Sand, loamy	my	SP-SM,	SM	A-1,	A-3	_	_ 0	0-15	70-100	70-100 50-100 25-75	25-75
		sand, gr	gravelly			_		_	_	_	_	_	
_		sand, lo	loamy			_			_		_	_	
_		coarse s	sand			_		_	_	_	_	_	
	14-22	Gravelly sand,	sand,	SP-SM,	SP, SM	SM A-1,	A-3	_	_ o	0-15	70-100	70-100   50-100   25-75	25-75
		loamy sand,	nd,			_		_	_	_	_	_	
		coarse sand,	and,			_		_	_	_			
		loamy coarse	arse			_			_				
-		sand				_		. —	-	-			
	22-60	Stratified		sand SP-SM.	ď	A-1		_	0	0-15	60-85	40-85	25-45
_	1	to veri			4	! ! _				 H		0	)
		T L GYEAR											
		9-6-1-7	7										
		מ שו ש	מווס										
_		_	_			_		_	-	_	_	_	

Table 23.--Engineering Index Properties--Continued

			בר בי היים בי היים בי היים בי היים בי היים בי היים בי היים בי היים בי היים בי היים בי היים בי היים בי היים בי	Classification	T T T T T T T T T T T T T T T T T T T	t t	D	Dercentage	7 2 2 2
Map symbol	Depth	USDA texture	1		- —			sieve number-	mber-
and					>10	3-10			
soil name			Unified	AASHTO	inches	inches	4	10	40
	In				Pct	Pct			
574C:									
Sayner	0-2	Loamy sand		A-1	0	0-15	85-100	85-100 75-100 45-75	45-75
	2 - 4	Loamy sand,	SM, SP-SM	A-1	0	0-15	85-100	75-100	40-75
	4-7	Loamy sand,	SM, SP-SM	A-1, A-3	0	0-15	70-100	70-100 50-100	25-75
		Ψ							
		loamy coarse		_	_				
_		sand		_	_		_		
	7-14	Sand, loamy	SM, SP-SM	A-1, A-3	0	0-15	70-100	50-100	25-75
_		sand, gravelly		_	_		_		
		sand, loamy			_				
	,	coarse sand				,			
	14-22		SM, SP, SP-SM	SP-SM A-1, A-3	o 	0-15	70-100	70-100 50-100	25-75
		coarse sand.							
		sand							
	22-60	Stratified sand SP	SP SP SW	N - 1	c	0-15	60-85	40-85	25-45
	}			! !-	,		:		
		gravelly							
		coarse sand			_				
		. —		. —	_		_		
574E:					_				
Sayner	0-2	Loamy sand		A-1	0	0-15	85-100	85-100   75-100   45-75	45-75
	2 - 4	Loamy sand,	SP-SM, SM	A-1	 	0-15	85-100	75-100	40-75
	4-7	Loamy sand,	SM, SP-SM	A-1, A-3	0	0-15	70-100 50-100 25-75	50-100	25-75
							_		
_		coarse sand,		_	_		_		
_		loamy coarse		_	_		_		
		sand			_				
	7-14		SM, SP-SM	A-1, A-3	0	0-15	70-100	70-100 50-100	25-75
		sand, loamy							
	14-22	Grayelly gand	מא מס מס-מא	GD_GM A-1 A-3		7 1 2	70-100	70-100 50-100	25-75
	7 7 7	loamy sand,	40		 	1	9	9	0
-		coarse sand,			_				
		loamy coarse							
_		Sand Dans							
	22-60	Stratified sand SD	SP. SP.SM	- 4 - 1	c	7 1 5	60-85	40-85	25-45
	4			1 4	 	1	0	0	
		gravelly							
		coarse sand							
_									
٠		-		_	-		-		

Table 23. -- Engineering Index Properties -- Continued

			Classif	Classification	Fragments	ents	Per	Percentage	pass
Map symbol	Depth	USDA texture		_			Ø	sieve number-	mber-
and soil name			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
	H				Pct	Pct			
579B:									
Parkfalls	0 - 5		SM	A-2-4	0 - 5	0-7	90-100 85-100 55-70	85-100	55-70
	2-8	Sandy Loam,	CL-ML, ML, SM. SC-SM	A-2, A-4	9-0	6-7	90-100	85-100	55-95
_	8-17			A-2, A-4	0-5	0-7	90-100 70-100	70-100	55-95
			SM, SC-SM						
		fine sandy							
_	7		No Co	, ,	<u>п</u>	1	100	7	1
	D C = / T	grand lu gandu	om, oc-om	F-W '7-W	n 1	)	001-07		)   
		loam							
-	30-33	Sandy loam,	SC-SM	A-2, A-4	0-5	0-7	75-100 70-100	70-100	40-70
_		gravelly sandy			_	_	_		
	;	loam					-		
	33-48	Sandy loam,	SC-SM	A-1-b, A-2	0-5	0-7	75-100 70-100	70-100	35-75
		gravelly sandy							
	48-80	Loamy sand,	GC-GM, SC-SM,	SC-SM, A-1-b, A-2	0 - 5	0-7	60-95	55-90	30-75
		gravelly loamy	SM, GM						
		sand		- <del></del> -					
Haplosaprists.									
a trous comme of									
r s alimia que la co									
615B:	•						, , , , , , , , , , , , , , , , , , ,		
Cress	0 - 3 1 - 3		SM, SC		o (	ر د - 0		00T-08	55-80
	3-15	Sandy Loam,	SM, SC	A-2-4, A-4	0	0-5	85-100	80-100	55-80
_	15-31	Loamy sand,	SM, SP-SM	A-3	0	0-5	55-100	20-95	20-75
		coarse sand,							
		graverry sama,							
		loamy sand							
	31-36	Gravelly loamy	SP-SM, SM	A-3	0	0-5	55-100   50-100   20-75	50-100	20-75
		sand, coarse							
					_				
_		sand, very		_	_		_	_	
_		gravelly loamy		_	_	_	_		
								_	
	36-60	Stratified sand GP,	GP, GP-GM,	A-1, A-2, A-3	0	0-2	30-100 25-95	25-95	15-65
		to very	SP-SM, SP						
		gravelly							
		ממוס ב							
_		_		_	_	_	_	_	

Table 23.--Engineering Index Properties--Continued

					10000	1	5	1	5	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0
Map symbol	Depth	USDA	texture				) 1 1 1 1		1 0	sieve number-	mber-
and soil name				ğ	Unified	AASHTO	>10  inches	>10 3-10 inches	4	10	40
	In						Pct	Pct			
6150;											
Cress	0 - 3	Sandy	loam	SM, S	SC	A-2-4, A-4	0	0-5	85-100 80-100	80-100	55-80
	3-15	Sandy	loam,	SM,	ಜಿ	A-2-4, A-4	0	0-5	85-100 80-100 55-80	80-100	55-80
		fine	sandy							_	
		loam									
	15-31	Loamy sand,	sand,	SM,	SP-SM	A-3	0	0-5	55-100 50-95	20-95	20-75
		coars	coarse sand,								
		grave	gravelly sand,								
		very	very gravelly								
		Loamy	Loamy sand								-
	31-36	Grave		SM,	SP-SM	A-3	0	0-5	55-100   50-100   20-75	50-100	20-75
		sama,									
		sand,	gravelly								
		, parid,	V C L V C L L								
		שרום ה מים ב	gravelly loamy								
_	36-60	0+ra+1+iod	בים ה ה ה ה	GD_GM	בַּ	A-1 A-2	- -	с 1	30-100 25-95	25.95	15.65
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						) )		0	1
		2 5	7 7 7 1 2 1	, ,	ara, or						
		graverry googgo	1 T T T T T T T T T T T T T T T T T T T								
		COBIL	coarse sand								
615D:											
Cress	0-3	Sandy loam	loam	SW, S	80	A-2-4, A-4	0	0-5	85-100 80-100	80-100	
_	3-15	Sandy	loam,		SM	A-2-4, A-4	0	0-5	85-100 80-100	80-100	55-80
		fine	sandy				_	_	_		
		loam	_				_	_	_	_	
	15-31	Loamy	sand,	SM, S	SP-SM	A-3	o —	0-2	55-100 50-95	20-95	20-75
		coars	coarse sand,						_		
		grave	gravelly sand,							_	
		very	very gravelly							_	
		loamy	, sand				_			_	
	31-36	Gravel		SP-SM,	I, SM	A-3	0	0-2	55-100 50-100 20-75	50-100	20-75
		sand,					_	_	_	_	
		sand,							_	_	
		sand,	very				_			_	
		grave	gravelly loamy								
		sand									
	36-60	Stratified		SP-SI	sand SP-SM, GP,	A-1, A-2, A-3	-3 0	0-5	30-100 25-95	25-95	15-65
		to very	ery	SP,	GP-GM		_			_	
		gravelly	lly				_		_	_	
_		coars	coarse sand				_		_		
_		_	_				_	_	_	_	

Table 23. -- Engineering Index Properties -- Continued

Lodans		1	Classification	cation	Fragments	ents	Per	Percentage pass	pass
and	7	בפאבם בפאבם			>10	3-10	a 	7 0 0	T T D GI
soil name			Unified	AASHTO	inches	inches	4	10	40
	u.				Pct	Pct			
623A:									
Capitola	0-5	Muck	PT	A-8	0	0	100	100	100
	5-7	Silt loam, loam	loam CL-ML, CL	A-4	0-5	0-7	80-100 75-100 60-10	75-100	60-10
	7-22	Silt loam,	ML, SC, CL,	A-2-4, A-4	0-5	0-7	80-100 75-100 45-10	75-100	45-10
	_	loam, sandy	CL-ML,		_		_	_	
		loam, fine	SC-SM, SM						
		sandy loam					_	_	
	22-33	Sandy loam,	SC, SM	A-1-b, A-2-4,	0-5	0-7	60-100 50-90	_	30-90
		fine sandy		A-4	_		_	_	
		loam, gravelly	_		_		_	_	
		loam	_		_		_	_	
	33-60	Sandy loam,	SC-SM, SM	A-1-b, A-2-4	0-5	0-7	60-100 50-90	_	30-60
	_	fine sandy	_				_	_	
	_	loam, gravelly	_				_	_	
		sandy loam						_	
624 A:									
Ossmer	0 - 4	Silt loam	ML, CL-ML	A-4	0	0-7	95-100 90-100 70-10	90-100	70-10
	4-6	Silt loam	CL-ML	A-4	0	0-7	95-100 90-100 70-10	90-100	70-10
	6-11	Silt loam	CL-ML, ML, CL	CL A-4	0	0-7	95-100 90-100 70-10	90-100	70-10
	11-26	Silt loam	CL, ML, CL-ML A-4	A-4	0	0-7	95-100 90-100 70-10	90-100	70-10
	26-34	Loam, sandy	SC-SM, CL,	A-1, A-2, A-4	_	0-7	55-100 50-100 30-95	50-100	30-95
	_	loam, gravelly	SM, SC,		_		_	_	
		sandy loam	CL-ML, ML		_		_	_	
	34-38	Sandy loam,	SM, SC-SM,	A-1, A-2, A-4	0	0-7	55-100 50-100 30-95	50-100	30-95
	_	gravelly sandy	SC, CL,		_		_	_	
		loam, loam	CL-ML, ML		_		_	_	
	38-60	Stratified sand GP, GP-GM,	GP, GP-GM,	A-1, A-2, A-3	0	0-7	45-100 40-95	_	15-65
		to very	SP, SP-SM		_		_	_	
	_	gravelly	_				_	_	
	_	coarse sand	_				_	_	
	_	_			_		_	_	

Table 23. -- Engineering Index Properties -- Continued

10.29   Fine sandy   10am	Codmin	- t	- KG011	Classif	Classification	Fragm	Fragments	Per	Percentage pass	pass
1.0 mane   In	and	d d	4400			>10	3-10	a 	D > D	- 190
The sandy loam   SM	soil name			Unified	AASHTO	inches	inches	4	10	40
d		п				Pct	Pct			
d	632A:									
10-29   Fine sandy   SM, CL-ML, A-2-4, A-4   0   0   95-100   90-100     10-29   Line sandy   ML, SC-SM   A-2-4, A-4   0   0   95-100   90-100     10-29   Fine sandy   SM, CL, ML, A-4   0   0   95-100   90-100     10-20   Line sandy   SC, ML, CL, A-4   0   0   95-100   90-100     10-20   Line sandy   SC, ML, CL, A-4   0   0   95-100   90-100     10-20   Line sandy   SC, ML, CL, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, CL-ML   A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   0   95-100   90-100     10-20   Fine sandy   SC-SM, ML, A-4   0   0   0   95-100   90-100     10-20   Fine sandy	Aftad	0-10	Fine sandy loam	SM	A-4	0	0	95-100	90-100	65-90
10am, very   ML, SC-SM		10-29	Fine sandy			0	0	95-100	90-100	45-95
fine sandy   fine sandy   fine sandy   fine sandy   fine sandy   SM, CI, ML, A-4   0   0   95-100   90-100     10-am, sandy   SM, CI, ML, CL, A-4   0   0   95-100   90-100     10-am, sandy   SC, ML, CL, A-4   0   0   95-100   90-100     10-am, sandy   SM   A-4   0   0   95-100   90-100     10-am, sandy   SM   A-4   0   0   95-100   90-100     10-am, sandy   SC, ML, ML, A-2-4, A-4   0   95-100   90-100     10-am, sandy   SC-SM, SM   A-4   0   0   95-100   90-100     10-am, very   SC-SM, SM   A-4   0   0   95-100   90-100     10-am, very   SC-SM, SM   A-4   0   0   95-100   90-100     10-am, very   SC, SM, ML, A-4   0   0   95-100   90-100     10-am, very   SM   CL, ML, SC, A-4   0   0   95-100   90-100     10-am, very   SM   CL, ML, SC, A-4   0   0   95-100   90-100     10-am, very   SM   CL, ML, SC, A-4   0   0   95-100   90-100     10-am, very   SM   CL, ML, SC, A-4   0   0   95-100   90-100     10-am, very   SM   CL, ML, SC, A-4   0   0   95-100   90-100     10-am, very   SM   CL, ML, SC, A-4   0   0   95-100   90-100     10-am, very   SM   CL, ML, A-4   0   0   95-100   90-100     10-am, very   SM   CL, ML, SC, A-4   0   0   95-100   90-100     10-am, very   SM   CL, ML, A-4   0   0   95-100   90-100     10-am, very   SM   CL, ML, A-4   0   0   95-100   90-100     10-am, very   SM   CL, ML, A-4   0   0   0   95-100     10-am, very   SM   CL, ML, A-4   0   0   0   95-100     10-am, very   SM   CL, ML, A-4   0   0   0   95-100     10-am, very   SM   CL, ML, A-4   0   0   0   95-100     10-am, very   SM   CL, ML, A-4   0   0   0   95-100     10-am, very   SM   CL, ML, A-4   0   0   0   95-100     10-am, very   SM   CL, ML, A-4   0   0   0   95-100     10-am, very   SM   CL, ML, A-4   0   0   0   95-100     10-am, very   SM   CL, ML, A-4   0   0   0   95-100     10-am, very   SM   CL, ML, A-4   0   0   0   95-100     10-am, very   SM   CL, ML, A-4   0   0   0   95-100     10-am, very   SM   CL, ML, A-4   0   0   0   95-100     10-am, very   SM   CL, ML, A-4   0   0   0   95-100     10-am, very   CL, ML, A-4			loam, very		_	_				
10-am, loam,   10-am, loam,   10-am, very   SC   10-am, very   SC   10-am, very   SC   10-am, very   SC   10-am, very   SC   10-am, very   SC   10-am, very   SW, CL, ML, CL, A-4   0   0   95-100   90-100   10-am, very   SW   10-am, very   SW   10-am, very   SW   10-am, very   SW   10-am, very   SW   10-am, very   SC SW, CL-ML   10-29   Fine sandy   SC SW, CL-ML   10-29   Fine sandy   SC SW, ML, A-4   0   0   95-100   90-100   10-am, very   SC SW, ML, A-4   0   0   95-100   90-100   10-am, very   SC SW, ML, A-4   0   0   95-100   90-100   10-am, very   SC SW, ML, A-4   0   0   95-100   90-100   10-am, very   SC SW, ML, A-4   0   0   95-100   90-100   10-am, very   SW   SW   SW   SW   SW   SW   SW   S			fine sandy		_	_				
19-36   Pine sandy   SM, CL, ML,   A-4   0   0   95-100   90-100	_		loam, loam,		_	_		_		
29-36 Fine sandy   SM, CL, ML, A-4   0   0   95-100   90-100     fine sandy   SC   ML, CL, A-4   0   0   95-100   90-100     10am, very   SM   SC   ML, CL, A-4   0   0   95-100   90-100     10am, very   SM   SC   ML, CL, A-4   0   0   95-100   90-100     10am, very   SM   A-4   0   0   95-100   90-100     10am, sandy   CL, ML, ML, A-4   0   0   95-100   90-100     10-29 Fine sandy   CL, ML, ML, A-4   0   0   95-100   90-100     10-29 Fine sandy   SC   SM, ML, A-4   0   0   95-100   90-100     10-29 Fine sandy   SC   SM, ML, A-4   0   0   95-100   90-100     10-20 Fine sandy   SC   SM, ML, A-4   0   0   95-100   90-100     10-20 Fine sandy   SC   SM, ML, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, SC, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, SC, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, SC, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, SC, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, SC, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, SC, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, SC, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, ML, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, ML, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, ML, A-4   0   0   95-100   90-100     10-20 Fine sandy   CL, ML, ML, ML, ML, ML, ML, ML, ML, ML, M			loamy sand			_		_		
10-am, very   SC   10-am, very   SC   10-am, very   SC   10-am, very   SC   10-am, very   SC   10-am, very   SM   10-am, very   SM   10-am, very   SM   10-am, very   SM   10-am, very   SM   10-am, very   SM   10-am, very   SC   SM, CL-ML   10-29   Fine sandy   10-am, very   SC-SM, CL-ML   10-29   Fine sandy   10-am, very   SC-SM, SM   10-am, very   SC-SM, SM   10-am, very   SC-SM, SM   10-am, very   SC   10-am, very   SC   10-am, very   SC   10-am, very   SM   10-am, very   10-am, very   SM   10-am, very   10-am, ve	_	29-36	Fine sandy	CI,	A-4	0	0	95-100	90-100	65-95
10am, sandy   10am, sandy   10am, sandy   10am, sandy   10am, sandy   10am, very   2M   10am, very   2M   10am, very   2M   10am, very   10am, sandy   10am, loam   10am, loam   10am, loam   10am, loam   10am, loam   10am, very   10am, loam   10am, very   10am, loam   10am, very   10am, loam   10am, loam   10am, very   10am, loam   10am, lo	_		loam, very	SC	_	_		_		
10am, sandy   10am, sandy   10am, loam   10am, loam   10am, loam   10am, loam   10am, loam   10am, loam   10am, very   SM   10am, very   SM   10am, loam   10am, loam   10am, loam   10am, loam   SC.SM, CL.ML   29-36   Fine sandy   SC.SM, ML,   A-4   0   0   95-100   90-100   10am, loam   1			fine sandy			_		_		
36-41   Pine sandy   SC, ML, CL,   A-4   0   0   95-100   90-100     fine sandy   SM	_					_		_		
36-41   Fine sandy   SC, ML, CL,   A-4   0   0   95-100   90-100     Loam, sandy   SM   CL, ML, CL,   A-4   0   0   95-100   90-100     Loam, loam   Loam						_		_		
Loam, very   SM		36-41	Fine sandy		A-4	0	0	95-100	90-100	65-95
Libean, sandy   A-4				SM		_		_		
10am, sandy   10am, sandy   10am, sandy   10am, sandy   10am, sandy   10am, sandy   10am, loam   10am, loam   10am, loam   10am, very			fine sandy			_		_		
10 mm, loam   10 mm, loam   10 mm, loam   10 mm, loam   10 mm, loam   10 mm, loam   10 mm, card to silt   SC-SM, CL-ML   10 - 29   Fine sandy   SC-SM, SM   A-2-4, A-4   0   0   95-100   90-100   10 mm, very   SC-SM, SM   A-2-4, A-4   0   0   95-100   90-100   10 mm, loam, very   CL   A-4   A-4   CL   A-4   A-4   CL   A-4   A-4   CL   A-4   A-4   CL   A-4   A-4   CL   A-4   A-4   CL   A-4   A-4   CL   A-4   A-4   CL   A-4   A-4   CL   A-4   A-4   CL   A-4   A-4   CL   A-4   A-4						_		_		
41-60   Stratified fine   ML, SM,   A-4   0   95-100   90-100     sand to silt   SC-SM, CL-ML					_	_				
d		41-60	Stratified fine	ML, SM,	A-4	0	0	95-100	90-100	60-95
d			sand to silt	SC-SM, CL-ML	_	_		_		
10-29   Fine sandy loam   SM   A-4   0   0   95-100   90-100     10-29   Fine sandy   SC-SM, SM   A-2-4, A-4   0   0   95-100   90-100     10-29   Fine sandy   SC-SM, ML,   A-4   0   0   95-100   90-100     10-2m, sandy   SC, SM, ML,   A-4   0   0   95-100   90-100     29-36   Fine sandy   CL   A-4   CL   A-4   0   0   95-100   90-100     10-2m, sandy   CL, ML, SC,   A-4   0   0   95-100   90-100     10-2m, vary   SM   SM   SM   SM   SM   SM   SM   S	632B:									
Fine sandy   CL-ML, ML,   A-2-4, A-4   0   0   95-100   90-100     loam, very   SC-SM, SM	Aftad	0-10	Fine sandy loam	SM	A-4	0	0	95-100	90-100	65-90
loam, very   SC-SM, SM		10-29	Fine sandy	CL-ML,		0	0	95-100	90-100	
fine sandy				SC-SM, SM		_		_		
loam, loam,   loam, sand			fine sandy		_	_		_		
Loamy sand			loam, loam,			_		_		
Fine sandy   SC, SM, ML, A-4   0   0     Loam, very   CL	_		loamy sand			_		_		
loam, very   CL		29-36	Fine sandy		A-4	0	0	95-100	90-100	65-95
fine sandy				CL	_	_		_		
Loam, sandy	_		fine sandy			_		_		
Loam, loam	_					_		_		
Fine sandy   CL, ML, SC, A-4   0   0     Loam, very   SM         fine sandy       Loam, sandy       Loam, loam       Stratified fine   CL-ML, ML, A-4   0   0     sand to silt   SC-SM, SM	_					_		_		
loam, very		36-41	Fine sandy		A-4	0	0	95-100	90-100	65-95
fine sandy			loam, very	SM	_	_				
loam, sandy	_		fine sandy			_		_		
loam, loam						_				
Stratified fine   CL-ML, ML,   A-4   0   0					_					
		41-60	Stratified fine	CL-ML, ML,	A-4	0	0	95-100	90-100	60-95
	_		sand to silt	SC-SM, SM	_	_		_		

Table 23. -- Engineering Index Properties -- Continued

			Classification	ication	Fragments	nents	Per	Percentage pass	pass
Map symbol	Depth	USDA texture					ď	sieve number-	mber-
and					>10	3-10			
soil name			Unified	AASHTO	inches	inches	4	10	40
	H H				Pot	Pct			
632C:					_		_		
Aftad	0-10	Fine sandy loam SM	SM	A-4	0	0	95-100   90-100	90-100	65-90
_	10-29	Fine sandy		A-2-4, A-4	0	0	95-100 90-100 45-95	90-100	45-95
		loam, very	SC-SM, SM				_	_	
_		fine sandy					_		
		loam, loam,							
_		loamy sand							
_	29-36	Fine sandy	CL, ML, SC,	A-4	0	0	95-100 90-100	90-100	65-95
		loam, verv							
		fine sandy							
_		loam, sandy							
_		loam, loam							
_	36-41	Fine sandv	CI, MI, SC,	A-4	0	0	95-100 90-100	90-100	65-95
		loam, very		<u> </u>					
		fine sandy							
		loam, sandy							
	41-60	44	SM, CL-ML,	A-4	0	0	95-100 90-100	90-100	60-95
		sand to silt		<u> </u>					
633F:		- —					_		
Pence	0-3	Sandy loam	SM	A-4	0	0-15	80-100 75-100 50-85	75-100	50-85
_	3-8	Sandy loam,	SC-SM, SM	A-2-4, A-4	0	0-15	80-100 75-100 45-95	75-100	45-95
		loam, fine			_		_	_	
		sandy loam,					_	_	
_		loamy sand			_		_	_	
_	8-15	Gravelly sandy	SM, SC-SM	A-1-b, A-2-4,	0	0-15	55-100 50-100	20-100	30-95
		loam, sandy		A-4			_	_	
		loam, loam,					_	_	
_		fine sandy					_	_	
_		loam					_		
_	15-21	Gravelly coarse GP-GM,	GP-GM, SP-SM,	SP-SM, A-1-b, A-3	0	0-15	45-100 40-95	40-95	20-70
_		sand, loamy	SM, GM				_		
_		sand, sand,					_		
_		loamy fine							
. —		sand							
	21-60	Stratified sand GP,	GP, SP-SM,	A-1, A-2, A-3	0	0-15	45-100 40-95	40-95	15-65
_		to very	SP, GP-GM				_	_	
_		gravelly					_		
_		coarse sand					_	_	
		-		_			_		

Table 23. -- Engineering Index Properties -- Continued

and - name - name - name - name - In - 10-2   Sandy - 19-26   Sandy - 19-26   Sandy - 19-26   Sandy - 19-26   Sandy - 19-26   Sandy - 19-26   Sandy - 19-26   Sandy - 19-26   Sandy - 19-26   Sandy - 19-26   Sandy - 19-27   Silt   - 10-18   Silt   - 10-18   Silt   - 10-18   Silt   - 10-18   Silt   - 10-18   Silt   - 10-18   Silt   - 10-18   Silt   - 10-18   Silt   - 10-27-34   Loam, - 27-34   Loam, - 38-60   Strati	# And the contract of the cont	Lodmin	C 6 7 7 7		Classification	ication	Fragments	nents	Per	Percentage	pass
11   name   In	11   10   10   10   10   10   10   10		4				>10	3-10	o 	0	1001
## Second Standy loam   SM	### Sandy loam   SM   A-1-b, A-2,   0   0-7				Unified	AASHTO	inches	inches	4	10	40
2-3   Sandy loam   SM   A-1-b, A-2,   0   0-7	### Second Standy loam   SW SC-SW   A-1-b, A-2,   0   0-7		u				Pct	Pct			
### Sandy loam, SM, SC-SM	2-3   Sandy loam   SM	633F:									
2-3   Sandy loam,   SW, SC-SM   A-1-b, A-2,   0   0-7     10-man, loam,   SM, SC, SC-SM   A-1-b, A-2,   0   0-7     10-16   Sandy loam,   SW, SC-SW, SC   A-1, A-2, A-4   0   0-7     10-26   Sandy loam,   SW, SC-SW, SC   A-1, A-2, A-4   0   0-7     10-26   Sandy loam,   SW, SC-SW, SC   A-1, A-2, A-4   0   0-7     10-26   Sandy loam,   CL-ML, SC,   A-1, A-2, A-4   0   0-7     10-28   Sandy loam,   CL-ML, SC,   A-1, A-2, A-4   0   0-7     10-man   Substitution   SP, SP-SM   A-1, A-2, A-4   0   0-7     10-man   Substitution   SP, SP-SM   A-1, A-2, A-3   0   0-15     10-man   Substitution   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-15	2-3   Sandy loam,   SM, SC-SM   A-1-b, A-2,   0   0-7     1-0am, 1oam,   SM, SC, SC-SM   A-1-b, A-2,   0   0-7     1-0am, 1oam, fine   SM, SC, SC, SM   A-1-b, A-2,   0   0-7     1-26   Sandy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     1-26   Sandy loam,   SM, SC-SM, SM   A-1, A-2, A-4   0   0-7     1-26   Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-7     1-26   Sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-7     1-26   Sandy loam,   SC-SM, SM   A-1, A-2, A-3   0   0-15     1-26   Sandy loam,   SC-SM, SM   A-1, A-2, A-3   0   0-15     1-26   Sandy loam,   SC-SM, SM   A-1, A-2, A-3   0   0-15     1-26   Silt loam   CL-ML   A-4   0   0-7     1-26   Silt loam   CL-ML   A-4   0   0-7     1-26   Silt loam   CL-ML   A-4   0   0-7     1-26   Silt loam   CL-ML   A-4   0   0-7     1-27   Silt loam   CL-ML   A-4   0   0-7     1-28   Sandy loam,   CL-ML   A-4   0   0-15     1-27   Silt loam   CL-ML   A-4   0   0-15     1-28   Sandy loam,   CL-ML   A-4   0   0-15     1-28   Sandy loam,   CL-ML   A-4   0   0-15     1-28   Sandy loam,   CL-ML   A-4   0   0-15     1-28   Sandy loam,   CL-ML   A-4   0   0-15     1-29   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     1-28   Sandy loam,   SP, SP-SM   A-1, A-2, A-3   0   0-15     1-29   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     1-29   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     1-29   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     1-29   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     1-29   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     1-29   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     1-29   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     1-29   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     1-29   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     1-29   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     1-29   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     1-29   Stratified sand   GP, GP-GM,   A-1, A-2, A-3	Padus	0-2	Sandy loam	SM	_	0	0-7	80-100	75-100	30-90
13-19   Sandy loam, loam   SM, SC, SC-SM A-1-b, A-2,   0   0-7	fine sandy   A-4		2-3	Sandy loam,			0	0-7	80-100	75-100	30-90
3-19   Sandy loam,   SM, SC, SC-SM   A-1-b, A-2,   0   0-7     loam, fines   A-4   0   0-7     sandy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     fine sandy loam,   SC-SM, SC   A-1, A-2, A-4   0   0-7     fine sandy loam,   SC-SM, SM   A-1, A-2, A-4   0   0-7     gravelly loam,   SC-SM, SM   A-1, A-2, A-4   0   0-7     fine sandy   SC-SM, SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   A-4   0   0-7     to very   SP-SM   A-4   0   0-7     silt loam   CL-ML, ML   A-4   0   0-7     tine sandy   CL-ML, ML   A-4   0   0-7     tine sandy   CL-ML, ML   A-4   0   0-7     sandy loam,   CL-ML, ML   A-4   0   0-7     tine sandy   CL-ML, ML   A-4   0   0-15     sandy loam,   CL-ML, ML   A-4   0   0-15     tine sandy   SM, SC   A-1, A-2, A-4   0   0-15     tine sandy   SM, SC   A-1, A-2, A-3   0   0-15     tine sandy   SM, SC   A-1, A-2, A-3   0   0-15     tine sandy   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP, SP-SM   A-1, A-2, A-3	3-19   Sandy loam,   SM, SC, SC-SM   A-1-b, A-2,   0   0-7     19-26   Sandy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     19-26   Sandy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     fine sandy   Cam,   SC-SM, SM   A-1, A-2, A-4   0   0-7     fine sandy   SC-SM, SM   A-1, A-2, A-4   0   0-7     gravelly loam,   SC-SM, SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   A-1, A-2, A-3   0   0-7     to very   SP-SM   A-4   0   0-7     carse sand   CL-ML, ML   A-4   0   0-7     silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     to very gravelly   CL   A-2, A-4   0   0-15     sandy loam,   CL-ML, ML   A-4   0   0-15     tine sandy   Cam   CL-ML, ML   A-4   0   0-15     tine sandy   Cam   CL-ML, ML   A-4   0   0-15     tine sandy   Cam   CL-ML, ML   A-4   0   0-15     tine sandy   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very gravelly   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   A-1, A-2, A-3   0   0-15     to very   SP-SM   A-1, A-2, A-3   0   0-15     to very					A-4	_		_	_	
3-19   Sandy loam,   SM, SC, SC-SM   A-1b, A-2,   0   0-7     10am, fine   Smdy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     gravelly loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     fine sandy   CL-ML, SC,   A-1, A-2, A-4   0   0-7     gravelly loam,   SC-SM, SM   A-1, A-2, A-4   0   0-7     gravelly loam,   SC-SM, SM   A-1, A-2, A-3   0   0-15     10am   Sitt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-15     10-18	3-19 Sandy loam, SW, SC, SC-SM A-1-b, A-2, 0 0-7	_					_			_	
19-26   Sandy loam   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     Etine sandy   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     Etine sandy   SC-SM, SM   A-1, A-2, A-4   0   0-7     Etine sandy   SC-SM, SM   A-1, A-2, A-4   0   0-7     Etine sandy   SC-SM, SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP, SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP, SP-SM   A-4   0   0-7     -3   0   0-15     Etine sandy   SP, SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP, SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP, SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP, SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP, SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP, SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP, SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP, SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP, SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP-SM   SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP-SM   A-1, A-2, A-3   0   0-15     Etine sandy   SP-SM   A-1, A-2, A-3   0	19-26   Sandy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     fine sandy   fine sandy   fine sandy   fine sandy   fine sandy   sandy loam,   SC-SM, SC   A-1, A-2, A-4   0   0-7     fine sandy   SC-SM, SM   A-1, A-2, A-4   0   0-7     fine sandy   SC-SM, SM   A-1, A-2, A-3   0   0-15     fine sandy   SP, SP-SM   A-4   0   0-7     fine sandy   SP, SP-SM   A-4   0   0-7     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-7     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-7     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-7     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-7     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-7     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-15     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-15     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-15     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-15     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-15     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-15     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-15     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-15     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-15     fine sandy   SIL loam   CL-ML, ML   A-4   0   0-15     fine sandy   CL-ML   CL-ML, ML   A-4   0   0-15     fine sandy   CL-ML   CL-ML, ML   A-4   0   0-15     fine sandy   CL-ML   CL-ML, ML   A-4   0   0-15     fine sandy   CL-ML   CL-ML, ML   A-4   0   0-15     fine sandy   CL-ML   CL-ML, ML   A-4   0   0-15     fine sandy   CL-ML   CL-ML, ML   A-4   0   0-15     fine sandy   CL-ML   CL-ML   CL-ML, ML   A-4   0   0-15     fine sandy   CL-ML		3-19	Sandy loam,	sc,		0	0-7	80-100	75-100	30-90
19-26   Sandy loam    SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     Grandy loam,   SM, SC-SM, SC   A-1, A-2, A-4   0   0-7     Ine sandy   Ioam   CL-ML, SC,   A-1, A-2, A-4   0   0-7     Gravelly loam,   SC-SM, SM   A-1, A-2, A-4   0   0-7     Ine sandy   Sp. SP-SM   A-1, A-2, A-3   0   0-15     Ine sandy   Sp. SP-SM   A-1, A-2, A-3   0   0-15     Ine sandy   Sp. SP-SM   A-4   0   0-7     Ine sandy   CL-ML, ML   A-4   0   0-7     Ine sandy   CL-ML, ML   A-4   0   0-7     Ine sandy   CL-ML, ML   A-4   0   0-7     Ine sandy   CL-ML, ML   A-4   0   0-7     Ine sandy   CL-ML, ML   A-4   0   0-15     Ine sandy   CL-ML, ML	19-26   Sandy loam					A-4	_		_	_	
19-26   Sandy loam,   SW, SC-SM, SC   A-1, A-2, A-4   0   0-7	19-26   Sandy loam,   SM, SC-SM, SC A-1, A-2, A-4   0   0-7			sandy loam			_		_	_	
Gravelly loam,   Gravelly loam,   CL-ML, SC,   A-1, A-2, A-4   O   O-7     Sandy loam,   CC-ML, SC,   A-1, A-2, A-4   O   O-7     Gravelly loam,   SC-SM, SM   I     Ine sandy   SP, SP-SM   A-1, A-2, A-3   O   O-15     Coarse sand   GP, GP-GM,   A-1, A-2, A-3   O   O-15     Coarse sand   CL-ML, ML   A-4   O   O-7     Silt loam   CL   CL   A-1, A-2, A-3   O   O-15     CL   CL   CL   A-1, A-2, A-3   O   O-15     CL   CL   CL   CL   CL   CL   CL	Secondary   CL-ML, SC,   A-1, A-2, A-4   0   0-7     Sandy loam,   CL-ML, SC,   A-1, A-2, A-4   0   0-7     Gravelly loam,   SC-SM, SM   Income   SP, SP-SM   SP		19-26	Sandy loam,	SC-SM,	A-1, A-2, A-4	0	0-7	25-100	20-100	30-90
fine sandy   fine sandy	Sandy loam,   CL-ML, SC,   A-1, A-2, A-4   0   0-7			gravelly loam,							
26-38   Sandyloam,   CL-ML, SC,   A-1, A-2, A-4   0   0-7     fine sandy   SC-SM, SM	26-38   Sandy loam,   CL-ML, SC,   A-1, A-2, A-4   0   0-7			fine sandy							
Sandy loam,   CL-ML, SC,   A-1, A-2, A-4   0   0-7     Fine sandy   GC-SM, SM   A-1, A-2, A-3   0   0-15     Loam   Statified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     Loam   Statified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     Loam   GL-ML   A-4   0   0-7     Silt loam   CL-ML   A-4   0   0-7     Silt loam   CL-ML, ML   A-4   0   0-7     Silt loam	Sandy loam,   SC-SM, SM			loam					-	-	
Standard   SC-SM, SM   Fine sandy   Fine sandy   SP, SP-SM   A-1, A-2, A-3   0   0-15     Lo very   SP, SP-SM   A-1, A-2, A-3   0   0-15     Lo very   SP, SP-SM   A-4   0   0-7     Silt loam   CL-ML   A-4   0   0-7     S-10     S-10   Silt loam   SM, SC   A-1-b, A-2   0   0-15     S-10   Silt loam   SM, SC   A-1-b, A-2   0   0-15     S-10   Silt loam   SM, SC   A-1-b, A-2   0   0-15     S-10   Silt loam   SM, SC   A-1-b, A-2   0   0-15     S-10   Silt loam   SM, SC   A-1-b, A-2   0   0-15     S-10   Silt loam   SM, SC   A-1-b, A-2   0   0-15     S-10   Silt loam   SM, SC   A-1-b, A-2   0   0-15     S-10   Silt loam   SM, SC   A-1-b, A-2   0   0-15     S-10   Silt loam   SM, SC   A-1-b, A-2   0   0-15     S-10   Silt loam   SM, SC   A-1-b, A-2   0   0-15     S-10   S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   SM, SC   A-1-b, A-2   0   0-15     S-10   SM, SC   A-1-b, A-2   0	Standard   SC-SM, SM   Fine sandy   Fine sandy   Fine sandy   Fine sandy   SP, SP-SM   A-1, A-2, A-3   0   0-15		26-38	Sandy loam,		A-2,		0-7	22-100	20-100	30-90
Since sandy   Fine sandy   SP-GM,   A-1, A-2, A-3   0   0-15     to very   SP-SM   SP-SM	Sa-60   Stratified sand   GP, GP, GM,   A-1, A-2, A-3   0   0-15     Lo very   SP, SP-SM   SP, SP-SM   Gravelly   Coarse sand   CL-ML   A-4   0   0-7     Lo-16   Silt loam   CL-ML   A-4   0   0-7     Lo-18   Silt loam   CL-ML   M-4   0   0-7     Lo-18   Silt loam   CL-ML   M-4   0   0-7     Lo-18   Silt loam   CL-ML   A-4   0   0-7     Lo-18   Silt loam   CL-ML   M-4   0   0-7     Lo-18   Silt loam   CL-ML   M-4   0   0-7     Lo-18   Silt loam   CL-ML   M-4   0   0-7     Loam   CL-ML   M-5   A-4   0   0-7     Loam   SM, SC   A-2, A-4   0   0-15     Loam   Sandy loam   SM, SC   A-1-b, A-2,   0   0-15     Loam   Sandy loam   SM, SC   A-1-b, A-2,   0   0-15     Loam   Sandy loam   SM, SC   A-4   0   0-15     Loam   Sandy loam   SM, SC   A-1-b, A-2,   0   0-15     Loam   Sandy loam   SM, SC   A-1-b, A-2,   0   0-15     Loam   Sandy loam   SM, SC   A-1-b, A-2,   0   0-15     Loam   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     Loam   Coarse sand   Caarse sa			gravelly loam,							
38-60   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15	38-60   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     to very   SP, SP-SM			fine sandy							
Sabob   Stratified sand GP, GP-GM,   A-1, A-2, A-3   0   0-15     coarse sand	Sabo Straining Sand GP, GP-SM, A-1, A-2, A-3 0 0-15     Lovery   SP, SP-SM   A-1, A-2, A-3 0 0-15     Coarse sand   CL-ML   A-4 0 0-7     4-5   Silt loam   CL-ML   A-4 0 0-7     10-18   Silt loam   CL-ML   M-4 0 0-7     18-27   2, A-3   O     19-20   Stratified sand   GP, GP-GM   A-1, A-2, A-3   O     19-20   Stratified sand   GP, GP-GM   A-1, A-2, A-3   O     19-20   Stratified sand   GP, GP-GM   A-1, A-2, A-3   O     19-20   Stratified sand   GP, GP-GM   A-1, A-2, A-3   O     19-20   Stratified sand   GP, GP-GM   A-1, A-2, A-3   O     19-20   Stratified sand   GP, GP-GM   A-1, A-2, A-3   O     19-20   Stratified sand   GP, GP-GM   A-1, A-2, A-3   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O     19-20   STRATIFIED   SP-SM   O				1			1	1		1
SP, SP-SM   Coarse sand   Cr-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   SM   SC   A-2   A-4   Silt loam   Sandy loam   SM   SC   A-1-b, A-2   Silt loam   Sandy loam   SM   SC   A-1-b, A-2   Silt loam   Silt loam   SM   SC   A-1-b, A-2   Silt loam   Silt loam   SM   SC   A-1   Silt loam   SI	Coarse sand   CL-ML   A-4   Coarse sand   CL-ML   A-4   Coarse sand   CL-ML   A-4   Coarse sand   CL-ML   A-4   Coarse sand   CL-ML   A-4   Coarse sand   CL-ML   ML   A-4   Coarse sand   CL-ML   ML   A-4   Coarse sand   CL-ML   ML   A-4   Coarse sand   CL-ML   ML   A-4   Coarse sand   CL-ML   ML   A-4   Coarse sand   CL-ML   ML   A-4   Coarse sand   CL-ML   CL-ML   ML   A-4   Coarse sand   CL-ML   CL-		38-60		GP, G	A-2,		0-15	45-100	40-95	15-65
Coarse sand   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   Silt loam   CL-ML   Silt loam   CL-ML   Silt loam   Silt	Coarse sand   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-2   A-4   Silt loam			to very							
Coarse sand   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   ML   A-4   Silt loam   CL-ML   Silt loam   CL-ML   Silt loam	Coarse sand   CL-ML   A-4   Silt loam   CL-ML   A-4   O   O-7     4-5   Silt loam   CL-ML   A-4   O   O-7     5-10   Silt loam   CL-ML   ML   A-4   O   O-7     10-18   Silt loam   CL-ML   ML   A-4   O   O-7     18-27   Silt loam   CL-ML   ML   A-4   O   O-7     18-27   Silt loam   CL-ML   ML   A-4   O   O-7     27-34   Loam   Gravelly   ML   SM   SC   A-2   A-4   O   O-15     4-5   Sandy loam   CL   A-4   O   O-15     5-10   Silt loam   CL-ML   ML   A-4   O   O-15     5-10   Silt loam   CL-ML   ML   A-4   O   O-15     6-7   CL-ML   ML   A-4   O   O-15     7-8   Sandy loam   CL   A-4   O   O-15     8-60   Stratified sand   GP   GP   GM   A-1   A-2   A-3   O   O-15     9-7   Coarse sand   CL-ML   A-1   A-2   A-3   O   O-15     9-7   CL-ML   CL-ML   CL-ML   A-1   A-2   A-3   O   O-15     9-7   CL-ML   CL-ML   CL-ML   A-1   A-2   A-3   O   O-15     9-7   CL-ML   CL-ML   CL-ML   A-1   A-2   A-3   O   O-15     9-7   CL-ML   CL-ML   CL-ML   A-1   A-2   A-3   O   O-15     9-7   CL-ML   CL-ML   CL-ML   A-1   A-2   A-3   O   O-15     9-7   CL-ML			gravelly							
Sin	Sin			coarse sand							
4-5   Silt loam   CL-ML   A-4   0   0-7     4-5   Silt loam   ML, CL-ML   A-4   0   0-7     5-10   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     18-27   Silt loam   CL-ML, ML   A-4   0   0-7     27-34   Loam, gravelly   ML, SM, SC,   A-2, A-4   0   0-15     very gravelly   CL                                 1	4-5   Silt loam   CL-ML   A-4   0   0-7     4-5   Silt loam   ML, CL-ML   A-4   0   0-7     5-10   Silt loam   CL-ML, ML   A-4   0   0-7     10-18   Silt loam   CL-ML, ML   A-4   0   0-7     18-27   Silt loam   CL-ML, ML   A-4   0   0-7     27-34   Loam, gravelly   ML, SM, SC,   A-2, A-4   0   0-15     very gravelly   CL   A-4   0   0-15     10am   34-38   Sandy loam,   SM, SC   A-1-b, A-2,   0   0-15     1	648B:									
Silt loam   ML, CL-ML   A-4   0   0-7     Silt loam   CL-ML, ML   CL   CL     fine sandy   CL   CL   CL   CL     fine sandy   CL   CL   CL   CL     fine sandy   CL   CL   CL   CL     fine sandy   CL   CL   CL   CL     fine sandy   CL   CL   CL   CL	Silt loam   ML, CL-ML   A-4   0   0-7     Silt loam   CL-ML, ML   A-4   0   0-7     Silt loam   CL-ML, ML   A-4   0   0-7     Silt loam   CL-ML, ML   A-4   0   0-7     Silt loam   CL-ML, ML   A-4   0   0-7     Sandy loam,   CL   A-2, A-4   0   0-15     time sandy   CL   A-2, A-4   0   0-15     sandy loam,   SM, SC   A-1-b, A-2,   0   0-15     dravelly loam   SL   A-4     0   0-15     time sandy   A-4     A-4           time sandy   CL   A-4           time sandy   CL   A-4         time sandy   CL   A-4       time sandy   CL   A-	Sconsin	0 - 4	Silt loam	CL-ML	A-4	0	0-7	92-100	91-100	81-94
Silt loam   CL-ML, ML   A-4   0   0-7     Silt loam   CL-ML, ML   A-4   0   0-7     Silt loam   CL-ML, ML   A-4   0   0-7     Silt loam   CL-ML, ML   A-4   0   0-7     Loam, gravelly   CL   A-2, A-4   0   0-15     tine sandy   CL   A-1, A-2, A-2   0   0-15     sandy loam,   SM, SC   A-1-b, A-2,   0   0-15     very gravelly   A-4   A-4   0   0-15     tine sandy   CL   A-4   CL   CL     very gravelly   A-4   A-4   CL     tine sandy   CL   A-4   CL     tine sandy   CL   A-4   CL     tine sandy   CL   A-4   CL     cravelified sand   CL   CL     cravelity   SP, SP-SM   COarse sand   CL     coarse sand   CL   CL   CL     coarse sand   CL   CL   CL     coarse sand   CL   CL     coarse sand   CL   CL   CL     coarse	Silt loam   CL-ML, ML   A-4   0   0-7     Silt loam   CL-ML, ML   A-4   0   0-7     Silt loam   CL-ML, ML   A-4   0   0-7     Silt loam   CL-ML, ML   A-4   0   0-7     Loam, gravelly   CL   A-2, A-4   0   0-15     tine sandy   CL   A-1, A-2, A-4   0   0-15     sandy loam,   SM, SC   A-1-b, A-2,   0   0-15     gravelly loam,   A-4   A-4               tine sandy   CL   A-4             tine sandy   CL   A-4           tine sandy   CL   A-4         toam   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     coarse sand   CL   CL   CL       coarse sand   CL   CL   CL       coarse sand   CL   CL   CL       coarse sand   CL   CL   CL       coarse sand   CL   CL   CL   CL     coarse sand   CL   CL   CL   CL     coarse sand   CL   CL   CL   CL     coarse sand   CL   CL   CL   CL     coarse sand   CL   CL   CL   CL     coarse   CL   CL   CL   CL   CL     coarse   CL   CL   CL   CL   CL     coarse   CL   CL   CL   CL   CL   CL     coarse   CL   CL   CL   CL   CL   CL     coarse   CL   CL   CL   CL   CL   CL     coarse   CL   CL   CL   CL   CL   CL   CL   C		4-5	Silt loam	ML, CL-ML	A-4	0	0-7	92-100	91-100	79-96
Silt loam   CL-ML, ML   A-4   0   0-7     Silt loam   CL-ML, ML   A-4   0   0-7     Loam, gravelly   ML, SM, SC,   A-2, A-4   0   0-15     sandy loam,   CL	Silt loam	_	5-10	Silt loam	CL-ML, ML	A-4	0	0-7	92-100	91-100	79-96
Silt loam   CL-ML, ML   A-4   0   0-7     Loam, gravelly   ML, SM, SC,   A-2, A-4   0   0-15     sandy loam,   CL	Silt loam   CL-ML, ML   A-4   0 0-7     Loam, gravelly   ML, SM, SC,   A-2, A-4   0 0-15     sandy loam,   CL                 fine sandy                   gravelly loam,   SM, SC                       tine sandy                               very gravelly                             tine sandy                                 tine sandy                                 Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15     coarse sand                                 coarse sand		10-18	Silt loam		A-4	0	0-7	92-100	91-100	79-96
Loam, gravelly   ML, SM, SC,   A-2, A-4   0   0-15   50-100   45-100   sandy loam,   CL	Loam, gravelly   ML, SM, SC,   A-2, A-4   0   0-15   50-100   45-100   sandy loam,   CL		18-27	Silt loam	CL-ML, ML	A-4	0	0-7	92-100	91-100	79-96
sandy loam,   CL	very gravelly         CL         A-1-b, A-2, A-3         0         0-15         54-100         50-100           fine sandy         A-4         A-4         A-4         A-1-b, A-2, A-3         0         0-15         54-100         50-100           gravelly loam, very gravelly         A-4         A-4         A-4         A-1, A-2, A-3         0         0-15         30-96         27-95           stratified sand GP, GP-GM, are very         SP, SP-SM         A-1, A-2, A-3         0         0-15         30-96         27-95           coarse sand         Coarse sand         CA-100         CA-100         CA-100         CA-100         CA-100         CA-100         CA-100         CA-100         CA-100         CA-100         CA-100         CA-100         CA-100         CA-100         CA-100         CA-100 <t< td=""><td></td><td>27-34</td><td>Loam, gravelly</td><td></td><td></td><td>0</td><td>0-15</td><td>20-100</td><td></td><td>37-92</td></t<>		27-34	Loam, gravelly			0	0-15	20-100		37-92
Fine sandy	Fine sandy			sandy loam,	G.		_		_	_	
fine sandy loam Sandy loam, Sandy loam, Sandy loam, Gravelly loam, If ine sandy Loam Stratified sand GP, GP-GM, Gravelly Gravelly Coarse sand	fine sandy   Sandy			very gravelly			_		_		
Loam   Sandy   SM, SC   A-1-b, A-2,   0   0-15   54-100   50-100     gravelly loam,   A-4	Loam   Sandy   SM, SC   A-1-b, A-2,   0   0-15   54-100   50-100     gravelly loam,   A-4										
Sandy loam,   SW, SC   A-1-D, A-2,   U   U-15   54-100   50-100     gravelly loam,	Sandy loam,   SW, SC   A-1-D, A-2,   U   U-15   54-100   50-100     gravelly loam,		,	Loam			•	L T			0
gravelly loam,     A-4       very gravelly     A-4       fine sandy             loam     Stratified sand   GP, GP-GM, A-1, A-2, A-3   0   0-15   30-96   27-95   coarse sand	Gravelly loam,   A-4		34-38	Sandy loam,			0	0-15	54 - T00	20-T00	36-82
very gravelly         fine sandy         loam         Stratified sand   GP, GP-GM, A-1, A-2, A-3   0   0-15   30-96   27-95   to very         gravelly         coarse sand	fine sandy			gravelly loam,		A-4					
fine sandy   loam   stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15   30-96   27-95     to very   SP.SM	fine sandy   loam   stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15   30-96   27-95     to very   SP.SM			very gravelly							
Loam   Stratified sand GP, GP-GM, A-1, A-2, A-3   0   0-15   30-96   27-95   Covery   SP, SP-SM   Coarse sand	Loam   Stratified sand   GP, GP-GM,   A-1, A-2, A-3   0   0-15   30-96   27-95			fine sandy							
Stratified sand GP, GP-GM, A-1, A-2, A-3   0   0-15   30-96   27-95   to very   SP, SP-SM   gravelly   coarse sand	Stratified sand GP, GP-GM, A-1, A-2, A-3   0   0-15   30-96   27-95   to very   SP, SP-SM								_		
SP, - and -	SP, 		38-60		GP, O		0	0-15	_	27-95	15-58
gravelly	gravelly coarse sand			to very							
				gravelly							
		_					_		_	_	

Table 23. -- Engineering Index Properties -- Continued

loam SC, fine Sand,	Unified		_		ŭ	ajeve number-	ajewe number-
il name  In    Cob   Sandy loam   SC,   Sandy loam   SC,   Sandy loam   SC,   Sandy loam   SC,   Sand, loam   SM,   Sand, loam   SM,   Sand, loam   SM,   Sand, sand,   SM,   Sand, sand,   SM,   Sand, sand,   SC,   Sand, sand,   SM,   Sand, sand,   SM,   Sand, sand,   SC,   Cobbly loamy   SM,   Sand, sand,   SC,   Cobbly sand,   SC,   Sand, cobbly sand,   SC,   Sand, cobbly sand,   SM,   dy loam,   Smandy loam,   Sma	Unified		>10	3-10	1	)	
In	_	AASHTO	inches inches	inches	4	10	40
enaw  2-4   Cobbly loamy   SM,   sand, gravelly   loamy fine   sand, loamy sand, loamy sand, loamy sand, cobbly   loamy sand, cobbly   loamy fine   sand, cobbly   loamy fine   sand, cobbly   loamy fine   sand, cobbly   loamy fine sand, sand, sand, cobbly loamy   fine sand, sand, sand, sand, sand, sand, sand, sand, sand, fine sand, fine sand,			Pct	Pct			
2-4   Cobbly loamy   SK,     sand, gravelly   Sm,     sand, gravelly   Sm,     loamy fine   Sand, loamy   SC,     sand, sandy   SC,     loamy sand, cobbly   SC,     sand, cobbly   SC,     sand, sandy   SK,     loamy sand, sandy   SK,     loamy sand, sand   SC,     cobbly loamy   SK,     cobbly loamy   SK,     sand, sand   SC,     cobbly loamy   SK,     sand, sand   SC,     cobbly sand,   SC-    cobbly sand,   SC-    cobbly sand,   SC-    cobbly sand,   SK-    sand, cobbly   SK-    coamy sand,   SK-    coam							
Cobbly loamy SM, sand, gravelly loamy fine sand, loamy and, loam Loamy sand, loam cobbly loamy fine sand, sand, cobbly loamy fine sand, cobbly loamy fine sand, cobbly loamy fine sand, sand, cobbly loamy fine sand, sand, cobbly loamy fine sand, sand, cobbly loamy fine sand, sand, cobbly loamy fine sand, sand, loamy sand, sandy loam, gravelly loam, gravelly loam, gravelly loam, fine sand, sandy loam, gravelly loam, fine sand, sandy loam, gravelly loam, gravelly loam, fine sand, fine sand, fine sand, fine sand, fine sand, fine sand, fine sand, fine sand, fine sand, fine sand,	SC, SC-SM,		0-2	0-20	90-100	90-100   75-100   55-80	55-80
sand, gravelly loamy fine sand, loamy fine sand, loamy sand, loam loamy sand, cobbly loamy fine sand, sand, sand, gravelly loamy fine sand, cobbly sand, sond fine sand sand, cobbly loamy fine sand sand, cobbly loamy fine sand sand, sand, cobbly loamy fine sand sand, cobbly loamy fine sand, sandy loam, gravelly loamy gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, fine sand, fine sand, fine sand, fine sand, gravelly loam,	SM, SC-SM,	SC A-1-b, A-2,	0	0-20	85-100 65-100 45-75	65-100	45-75
loamy fine sand, loamy loam loam Loamy sand, loam cobbly loam cobbly loamy sand, loamy sand, gravelly loamy sand, sandy loamy sand, gravelly loamy sand, sand loamy sand, gravelly loamy fine sand sand, cobbly fine sand sand, cobbly fine sand sand, loamy fine sand sandy loam, fine sand sandy loam, fine sand, sandy loam, fine sand, sandy loam, gravelly loamy fine sand, sandy loam, fine sand, sandy loam, gravelly loamy fine sand, sandy loam, fine sand, sandy loam, gravelly loamy fine sand, sandy loam, fine sand, gravelly loamy fine sand, fine sand,		A-2-4	_		_		
sand, loamy sand, sandy loam Loamy sand, loamy fine sand, cobbly loamy fine sand, sandy loam Loamy sand, gravelly loamy sand, sand cobbly sand, gravelly loamy fine sand, gravelly loamy fine sand, sand, cobbly sand, sand loamy sand, sand, loamy fine sand sand, loamy fine sand sandy loam, gravelly loamy fine sand sandy loam, gravelly loamy fine sand, sandy loam loamy sand, sandy loam gravelly loamy fine sand, sandy loam fine sand, sandy loam gravelly loamy fine sand, sandy loam gravelly loamy fine sand, sandy loam gravelly loamy fine sand,							
loam, sandy loam loamy sand, gravelly loamy sand, cobbly loam tine sand, sandy loam Loamy sand, gravelly loamy sand, sand cobbly sand, gravelly loamy fine sand, gravelly loamy fine sand, gravelly loamy fine sand, sand, cobbly sand, SC-5 loamy sand, sand, loam, fine sand, sandy loam, fine sand, sandy loam, fine sand, sandy loam, fine sand, sandy loam, gravelly loamy fine sand, fine sand, fine sand, fine sand,	loamy						
Loamy sand, gravelly loamy sand, cobbly loamy fine sand, sandy loam Loamy sand, cobbly loamy fine sand, gravelly loamy sand, sand Loamy sand, gravelly loamy fine sand Sand, cobbly fine sand Sand, cobbly sand, loamy fine sand sand, loamy fine sand sandy loam, sandy loam, gravelly loamy fine sand, sandy loam loamy sand, sandy loam fine sand, sandy loam, gravelly loamy fine sand, fine sand, sandy loam, gravelly loamy fine sand,							
Inoamy sand,  gravelly loamy sand, cobbly loamy fine sand, sandy loam sand, cobbly loamy fine sand, gravelly loamy fine sand cobbly sand, gravelly loamy fine sand sand, cobbly gravelly loamy fine sand sand, loamy fine sand sand, loamy fine sand, gravelly loamy fine sand, gravelly loamy fine sand, gravelly loamy fine sand, gravelly loam, fine sand, fine sand, sandy loam, gravelly loam, gravelly loam, fine sand,			_				
gravelly loamy sand, cobbly loamy fine sand, loam loam, sandy loamy fine sand, gravelly loamy sand, sand, cobbly sand, sond fine sand, cobbly loamy fine sand, sand sand, cobbly sand, cobbly sand, cobbly sand, sandy loam, gravelly loamy fine sand, gravelly loamy fine sand, gravelly loam,	SC, SC-SM,	SM A-2, A-1-b,	0	0-25	85-100 65-100		45-75
sand, cobbly loamy fine sand, sandy loam loamy sand, cobbly loamy fine sand, gravelly loamy fine sand cobbly sand, gravelly loamy fine sand gravelly loamy fine sand sand, cobbly loamy sand, gravelly loamy fine	oamy	A-2-4					
loamy fine sand, sandy loam loamy sand, cobbly loamy fine sand, gravelly loamy sand, sand cobbly sand, gravelly loamy fine sand Sand, cobbly loamy sand, gravelly loamy fine sand sandy loam loamy sand, gravelly loamy fine sand, gravelly loamy fine sand, gravelly loamy fine sand, sandy loam loamy sand, sandy loam loamy sand, fine sand, gravelly loamy fine sand,	cobbly						
sand, sandy loam Loamy sand, cobbly loamy fine sand, gravelly loamy sand, sand cobbly sand, gravelly loamy fine sand gravelly loamy fine sand Sand, cobbly loamy sand, gravelly loamy fine sand, gravelly loamy fine sand, gravelly loamy fine sand, sandy loam loamy sand, sandy loam incamy sand, fine sand, sandy loam fine sand, gravelly loamy fine sand,	fine -						
Loamy sand,  cobbly loamy fine sand, gravelly loamy sand, sand cobbly sand, gravelly loamy fine sand Sand, cobbly loamy sand, gravelly loamy fine sand, gravelly loamy fine sand, gravelly loamy fine sand, gravelly loamy fine sand, sandy loam loamy sand, gravelly loamy fine sand, gravelly loamy fine sand,							
Loamy sand, cobbly loamy fine sand, gravelly loamy sand, sand Loamy sand, gravelly loamy fine sand Sand, cobbly loamy sand, gravelly loamy fine sand, gravelly loamy fine sand, sandy loam Loamy sand, sandy loam ineamy sand, sandy loam fine sand, sandy loam fine sand, gravelly loamy fine sand, gravelly loamy							
cobbly loamy fine sand, gravelly loamy sand, sand Loamy sand, cobbly sand, gravelly loamy fine sand, cobbly loamy sand, gravelly loamy fine sand, sandy loam Loamy sand, sandy loam sandy loam loamy sand, fine sand, sandy loam fine sand, gravelly loamy fine sand,	sand, SC, SC-SM,	A-2, A-1-b	0	0-25	85-100 65-100	65-100	45-75
fine sand, gravelly loamy sand, sand Loamy sand, cobbly sand, gravelly loamy fine sand Sand, cobbly loamy sand, gravelly loamy fine sand, gravelly loamy fine sand, sandy loam Loamy sand, sandy loam fine sand, sandy loam fine sand, gravelly loamy fine sand, fine sand,							
gravelly loamy sand, sand loamy sand, cobbly sand, gravelly loamy fine sand sand, gravelly loamy fine sand, sandy loam, gravelly loamy gravelly loam, gravelly loam, fine sand, fine sand, fine sand, fine sand, fine sand, fine sand,							
gravelly loamy sand, sand cobbly sand, gravelly loamy fine sand Sand, cobbly loamy sand, gravelly loamy fine sand, sandy loam loamy sand, sandy loam gravelly loamy fine sand, gravelly loamy fine sand, gravelly loamy fine sand,	( )						
Loamy sand, cobbly sand, gravelly loamy fine sand Sand, cobbly loamy sand, gravelly loamy fine sand, sandy loam Loamy sand, sandy loam, gravelly loamy fine sand, fine sand, gravelly loamy fine sand,	sily loamy						
Loamy sand, cobbly sand, gravelly loamy fine sand, gravelly loamy fine sand, sandy loam Loamy sand, sandy loam gravelly loamy gravelly loamy fine sand, fine sand,	_		-			,	
cobbly sand, gravelly loamy fine sand Sand, cobbly loamy sand, gravelly loamy fine sand, sandy loam Loamy sand, sandy loam, gravelly loamy fine sand, fine sand,	Ω.	A-1-b, A-2,	0	0-25	85-100	85-100   65-100	45-75
gravelly loamy fine sand Sand, cobbly loamy sand, gravelly loamy fine sand, sandy loam Loamy sand, sandy loam, gravelly loamy fine sand, fine sand,	ly sand, SC-SM, SC	A-2-4	_				
fine sand Sand, cobbly loamy sand, gravelly loamy fine sand, sandy loam Loamy sand, sandy loam, gravelly loamy fine sand, fine sand,	ally loamy		_			_	
Sand, cobbly   S loamy sand, gravelly loamy fine sand, sandy loam loamy sandy loam, gravelly loamy fine sand, fine sandy	sand		_		_	_	
loamy sand, gravelly loamy fine sand, sandy loam Loamy sand, gravelly loamy fine sand,	cobbly	A-3, A-1-b,	0	0-25	85-100	65-100	40-80
gravelly loamy fine sand, sandy loam Loamy sand, sandy loam, gravelly loamy fine sand,	sand, SM, SP-SM	A-2, A-2-4	_		_	_	
fine sand, sandy loam Loamy sand, sandy loam, gravelly loamy fine sand,	elly loamy	_	_		_	_	
sandy loam Loamy sand, SC, sandy loam, gravelly loamy fine sand, fine sandy	sand,		_				
Loamy sand, SC, sandy loam, gravelly loamy fine sand, fine sandy	_		_		_	_	
sandy loam,   gravelly loamy   fine sand,   fine sandy	SC, SC-SM,	SM A-1-b, A-2,	0	0-25	85-100	85-100   65-100	45-80
gravelly loamy   fine sand,   fine sandy	, loam,	A-2-4	_		_		
fine sand,   fine sand,	ally loamy		_				
fine sandy	sand,						
	sandy						
loam							
75-80 Loamy sand, SC, SC		A-1-b, A-2,	0	0-25	85-100 65-100	65-100	45-75
gravelly loamy SM,	oamy SM,	A-2-4					
			_				
						_	

Table 23. -- Engineering Index Properties -- Continued

			Classif	Classification	Fragments	nents	Per	Percentage pass	pass
Map symbol	Depth	USDA texture					02	sieve number-	mber-
and				_	>10	3-10			
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	п				Pct	Pct			
670C:									
Pence	0-3	Sandy loam	SM	A-4	0-2	0-15	0-15  80-100 75-100 50-85	75-100	50-85
_	3-8	Sandy loam,	SM, SC-SM	A-2-4, A-4	0	0-15	80-100	80-100   75-100   45-95	45-95
_		loam, fine		_	_				
		sandy loam,							
_		loamy sand		_	_				
	8-15	Gravelly sandy	SC-SM, SM	A-1-b, A-2-4,	0	0-15	55-100	55-100 50-100 30-95	30-95
_		loam, sandy		A-4	_				
_		loam, loam,		_	_		_		
		fine sandy		_	_		_	_	
		loam		_	_			_	
_	15-21	Gravelly coarse SP-SM, SM,	SP-SM, SM,	A-1-b, A-3	0	0-15	45-100 40-95		20-70
_		sand, loamy	GP-GM, GM	_	_				
_		sand, sand,		_	_				
		loamy fine		_	_			_	
		sand							
	21-60	Stratified sand SP-SM, SP,	SP-SM, SP,	A-1, A-2, A-3	0	0-15	45-100 40-95	40-95	15-65
_		to very	GP-GM, GP	_	_				
_		gravelly		_	_		_		
		coarse sand		_	_		_	_	

Table 23. -- Engineering Index Properties -- Continued

a diameter of the control of the con	1 1	1	Classification	ication	Fragments	ents	Per	Percentage pass	pass
and and	n-d-b-c-ii	בארמום בארמום			>10	3-10	<u> </u>	D > D -	100
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	In				Pct	Pct			
670E:	c			·	· ·	ć	1 1 2 7		0
wedsta was	2 2 1 1 2 1 2 1 2 1	Gravelly loamy	SM, SC-SM, SC A-1-b,	A-1-b, A-2,	0	0-50	85-100 65-100 45-75	65-100	45-75
		fine sand,		A-2-4					
_		loamy sand,			_		_	_	
		sandy loam,							
_		cobbly loamy					_	_	
_		sand		_			_	_	
_	4-16	Gravelly loamy	SM, SC-SM, SC A-2, A-1-b,	A-2, A-1-b,	0	0-25	85-100 65-100	65-100	45-75
_		sand, loamy		A-2-4	_		_	_	
_		sand, cobbly			_		_		
_		loamy fine			_		_	_	
_		sand, sandy			_		_	_	
_		loam			_		_	_	
_	16-20	Loamy sand,	SC-SM, SC,	A-2, A-1-b	0	0-25	85-100 65-100	65-100	45-75
_		cobbly loamy	SP-SM, SM				_	_	
_		fine sand,					_	_	
_		gravelly loamy			_		_	_	
_		sand, sand			_		_	_	
_	20-27	Loamy sand,	SP-SM, SC,	A-1-b, A-2,	0	0-25	85-100 65-100	65-100	45-75
_		cobbly sand,	SC-SM, SM	A-2-4			_	_	
_		gravelly loamy						_	
_		fine sand			_		_	_	
	27-43	Sand, cobbly	SP-SM, SC,	A-3, A-1-b,	0	0-25	85-100	65-100	40-80
		loamy sand,	SC-SM, SM	A-2, A-2-4					
_		gravelly loamy			_		_	_	
		fine sand,							
		sandy loam			_		_	_	
_	43-75	Loamy sand,	SC-SM, SC, SM	SM A-1-b, A-2,	0	0-25	85-100	65-100	45-80
_		sandy loam,		A-2-4			_		
		fine sandy							
		loam, gravelly							
		loamy fine							
		sand					_	_	
	75-80	Loamy sand,	SC, SC-SM,	A-1-b, A-2,	0	0-25	85-100 65-100	65-100	45-75
		gravelly loamy	SM, SP-SM	A-2-4			_	_	
		sand, cobbly						-	
		sand							
								-	
-		_		_	_		-		

Table 23.--Engineering Index Properties--Continued

and  In	Lodmys neW	Denth	HSDA textiire	Classification	ication	Fragments	ents	Per a	Percentage pass	pass
In name	and	1				>10	3-10			
In   Pet   Pet				Unified	AASHTO	inches	inches	4	10	40
Sandy loam   SM   A-4   0-2   0-15		п				Pct	Pct			
e	670E:									
3-8   Sandy loam,   SC-SM, SW   A-2-4, A-4   0   0-15	Pence	0-3		SM	A-4	0-2	0-15	80-100		50-85
Sandy loamy   Sc. SC-SM   A-1-b, A-2-4,   0   0-15     Caravelly sandy   SM, SC-SM   A-1-b, A-2-4,   0   0-15     Loam, sandy   SM, SC-SM   A-1-b, A-2-4,   0   0-15     Loam, sandy   SM, SC-SM,   A-1-b, A-3   0   0-15     Sand, loamy fine   Sand, Sand,   SM, GP-GM   A-1-b, A-2   0   0-15     Loamy sand   GP-GM, SP-SM,   A-1-b, A-2   0   0-15     Carses sand   GP-GM, SP-SM,   A-1-b, A-2   0   0-15     Loamy sandy   SM, SC-SM, SC   A-1-b, A-2   0   0-15     Loamy sandy   SC, SC-SM, SM   A-1-b, A-2   0   0-15     Loamy sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     Loamy sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     Sandy loam   SC, SC-SM,   A-1-b, A-2   0   0-15     Sandy loam   SC, SC-SM,   A-1-b, A-2   0   0-15     Sandy sandy   SM, SP-SM   A-1-b, A-2   0   0-15     Sandy sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     Sandy loamy sandy   SC, SC-SM,		3-8				0	0-15	80-100		45-95
10am, sandy   SM, SC-SM   A-1-b, A-2-4,   0   0-15     10am, sandy   SM, SC-SM   A-1-b, A-2-4,   0   0-15     10am, sandy   SM, SC-SM   A-1-b, A-2-4,   0   0-15     10am, loam,   SM, GP-SM,   A-1-b, A-3   0   0-15     15-21   Gravelly coarse   GM, SP-SM,   A-1-b, A-3   0   0-15     sand, loamy fine   SM, GP-GM   A-1-b, A-2   0   0-15     10am, fine   Sand, SP-SM,   A-1, A-2, A-3   0   0-15     10am, loamy fine   SC, SC-SM, SM A-2, A-4   0-2   0-15     10am, loamy sand   SC, SC-SM, SM A-1-b, A-2   0   0-15     10am, loamy sand   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, loamy sand   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     10am, sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     10am, sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     10am, sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     10am, sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15										
8-15   Gravelly sand   SM, SC-SM   A-1-b, A-2-4,   0   0-15     10am, loam, sandy   A-4   A-1-b, A-2-4,   0   0-15     15-21   Gravelly coarse   GM, SP-SM,   A-1-b, A-3   0   0-15     sand, loamy fine   SM, GP-GM   A-1-b, A-3   0   0-15     sand, loamy fine   SM, GP-GM   A-1-b, A-2   0   0-15     coarse sand   GP-GM, SP-SM,   A-1, A-2, A-3   0   0-15     coarse sand   GP-GM, SP-SM,   A-1, A-2, A-3   0   0-15     coarse sand   GP-GM, SC-SM, SM   A-2, A-4   0-2   0-15     coarse sand   SC, SC-SM, SC-A1-b, A-2   0   0-15     sand, gravelly   SM, SC-SM,   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM,   A-1-b, A-2   0   0-15     sand, loamy sand   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM,   A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b,										
15-21   Gravelly Sandy   A-4   A-4   Dan, loam, sand, loam, loam, sand, loam			Loamy sand			•	ī			L C
Loam, sandy   A-4		8-15	Gravelly sandy			0	0-15	25-100	20-100	30-95
15-21   Gravelly coarse   GM, SP-SM,   A-1-b, A-3   0   0-15     sand, loamy sand   SM, GP-GM   A-1-b, A-3   0   0-15     sand, sand,   Sm, GP-GM   A-1, A-2, A-3   0   0-15     sand fine   Sm, GP-GM   SP-SM,   A-1, A-2, A-3   0   0-15     coarse sand   GP-GM, SP-SM,   A-1, A-2, A-3   0   0-15     coarse sand   GP-GM, SP-SM, SM   A-2, A-4   0-2   0-15     sand, loamy sand   SC, SC-SM, SM   A-1-b, A-2   0   0-15     sand, sandy loamy   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, sandy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sandy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sandy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, loamy sand   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, loamy sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, loamy sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, loamy sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, loamy sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, loamy sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, loamy sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, loamy   SM, S					A-4					
15-21   Gravelly coarse   GM, SP-SM,   A-1-b, A-3   0   0-15     sand, loamy   SM, GP-GM										
15-21   Gravelly coarse   GM, SP-SM,   A-1-b, A-3   0   0-15     sand, sand,   SM, GP-GM     -1-b, A-3   0   0-15     loamy fine   sand			loam gardy							
sand, loamy   SM, GP-GM   sand, loamy   SM, GP-GM   sand, sand, sand, loamy   GP-GM, SP-SM, A-1, A-2, A-3   0   0-15     to very   GP-GM, SP-SM, A-1, A-2, A-3   0   0-15     to very   GP-GM, SP-SM, A-1, A-2, A-4   0-2   0-15     coarse sand   SC, SC-SM, SM A-2, A-4   0-2   0-15     loam, loamy   SC, SC-SM, SC A-1-b, A-2   0   0-15     loam, loamy   SP-SM, SM, A-1-b, A-2   0   0-15     sand, gravelly   SP-SM, SM, A-1-b, A-2   0   0-15     sand, sand, sandy   SC, SC-SM, A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sa		15-21	Gravelly coarse			0	0-15	45-100	40-95	20-70
Sand, sand,   Sand,			sand, loamy							
10amy fine   sand   GP-GM, SP-SM, A-1, A-2, A-3   0   0-15										
Stratified sand   GP-GM, SP-SM, A-1, A-2, A-3   0   0-15     to very   GP, SP										
1-60   Stratified sand   GP-GM, SP-SM,   A-1, A-2, A-3   0   0-15     coarse sand   GP, SP			sand							
Lo very   GP, SP		21-60		GP-GM, SP-SM,	A-1, A-2, A-3	0	0-15	45-100	40-95	15-65
nerhill,  nerhill,  ny			to very	GP, SP		_				
nerhill,  nerhill,  ny			gravelly			_		_		
nerhill,  ny  0-3 Sandy loam  SC, SC-SM, SM A-2, A-4  1-0-am, loamy  sand, gravelly  sand, gravelly  loamy sand  16-34 Loamy sand  16-34 Loamy sand  16-34 Sand, loamy  SC, SC-SM, SM, A-1-b, A-2  Sand, gravelly  SC, SC-SM, A-1-b, A-2  O 0-15  Sand, sandy  SC, SC-SM, A-1-b, A-2  O 0-15  Sand, sandy  SC, SC-SM, A-1-b, A-2  O 0-15  Sand, gravelly  SM, SP-SM  1-0-amy sand  1-0-amy sand  SC, SC-SM, A-1-b, A-2  O 0-15  Sand, gravelly  SM, SP-SM  SA-1-b, A-2  O 0-15  Sand, loamy  SC, SC-SM, A-1-b, A-2  O 0-15  Sand, loamy  SM, SP-SM  SM, SP-SM			coarse sand							
nerhill,  13-12 Gravelly sandy SM, SC-SM, SM A-2, A-4  1-12-16 Gravelly loamy SC, SC-SM, SC A-1-b, A-2, 0 0-15  12-16 Gravelly loamy SC, SC-SM  16-34 Loamy sand, 3ravelly SM, SP-SM, A-1-b, A-2 0 0-15  16-34 Loamy sand, SC, SC-SM, A-1-b, A-2 0 0-15  16-34 Sand, loamy SC, SC-SM, A-1-b, A-2 0 0-15  16-34 Sand, loamy SC, SC-SM, A-1-b, A-2 0 0-15  16-34 Sand, loamy SC, SC-SM, A-1-b, A-2 0 0-15  16-34 Sand, loamy SC, SC-SM, A-1-b, A-2 0 0-15  16-36 Gravelly SM, SP-SM  16-80 Gravelly SM, SP-SM  16-80 Gravelly SM, SP-SM  18-80 Gravelly SM, SP-SM  18-80 Gravelly loamy SC, SC-SM, A-1-b, A-2 0 0-15  18-80 Gravelly loamy SM, SP-SM  18-80 Gravelly SM, SP-SM  18-80 Gravelly loamy SM, SP-SM  18-80 Gravelly SM, SP-SM  18-80 Gravelly loamy SM, SP-SM	. 01.12									
3-12   Gravelly sandy   SK, SC-SK, SK   A-2, A-4   0-2   0-15     3-12   Gravelly sandy   SK, SC-SK, SC   A-1-b, A-2,   0   0-15     10am, loamy   SP-SK, SK   A-1-b, A-2,   0   0-15     10am, sand   SP-SK, SK   A-1-b, A-2   0   0-15     12-16   Gravelly loamy   SC, SC-SK   A-1-b, A-2   0   0-15     16-34   Loamy sand   SC, SC-SK   A-1-b, A-2   0   0-15     10amy sand   SC, SC-SK   A-1-b, A-2   0   0-15     10amy sand   SC, SC-SK   A-1-b, A-2   0   0-15     10amy sand   SC, SC-SK   A-1-b, A-2   0   0-15     10amy sand   SC, SC-SK   A-1-b, A-2   0   0-15     10amy sand   SC, SC-SK   A-1-b, A-2   0   0-15     10amy sand   SC, SC-SK   A-1-b, A-2   0   0-15     10amy sand   SC, SC-SK   A-1-b, A-2   0   0-15     10amy sand   SC, SC-SK   A-1-b, A-2   0   0-15     10amy sand   SC, SC-SK   A-1-b, A-2   0   0-15     10amy sand   SC, SC-SK   A-1-b, A-2   0   0-15     10amy sand   SC, SC-SK   SC-SK   A-1-b, A-2   0   0-15     10amy sand   SC, 15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     loamy sand   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     loamy sand   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, loamy   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-1-b, A-2   0   0-15     sand, sand   SM,	stony	0-3	Sandy loam	SC-SM,	A-2, A-4	0-2	0-15	85-100	80-95	55-75
loam, loamy   A-4     sand, gravelly   A-1-b, A-2   0     sand, loamy   SP-SM, SM, A-1-b, A-2   0   0-15     sand, sandy   SC, SC-SM   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, loamy   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b, A-1-b,		3-12	Gravelly sandy	SC-SM,	A-1-b, A-2,	0	0-15	60-100	50-95	35-75
Sand, gravelly			loam, loamy							
Loamy sand   SP-SM, SM,   A-1-b, A-2   0   0-15     sand, loamy   SC, SC-SM   A-1-b, A-2   0   0-15     sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, loamy   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   SM, SP-S										
Gravelly loamy   SP-SM, SM,   A-1-b, A-2   0   0-15     sand, loamy   SC, SC-SM   A-1-b, A-2   0   0-15     sand, sandy   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, loamy   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15     sand, loamy   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, loamy   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A-1-b, A-2   0   0-15     sand, sand   SM, SP-SM   A-1-b, A										
sand, loamy   SC, SC-SM		12-16	Gravelly loamy	SP-SM, SM,		0	0-15	001-09	20-95	35-75
sand, sandy				SC, SC-SM		_		_		
Loammy sand,   SC, SC-SM,   A-1-b, A-2   0   0-15   sand, gravelly   SM, SP-SM   A-1-b, A-2   0   0-15   loamny sand   SC, SC-SM,   A-1-b, A-2   0   0-15   sand, gravelly   SM, SP-SM						_		_	_	
Loamy sand,   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, gravelly   SM, SP-SM         loamy sand                     sand, loamy                                   loamy sand			loam			_		_	_	
sand, gravelly   SM, SP-SM		16-34	Loamy sand,	SC, SC-SM,		0	0-15	001-09	20-95	35-75
loamy sand				SM, SP-SM		_		_		
Sand, loamy   SC, SC-SM,   A-1-b, A-2   0   0-15       sand, gravelly   SM, SP-SM         loamy sand										
sand, gravelly   SM, SP-SM     loamy sand   Gravelly loamy   SC, SC-SM,   A-1-b, A-2   0   0-15     sand, loamy   SM, SP-SM		34-46				0	0-15	60-100	50-95	35-75
loamy sand										
Gravelly loamy   SC, SC-SM,   A-1-b, A-2   0   0-15   sand, loamy   SM, SP-SM   sand, sand			loamy sand							
loamy SM,		46-80	Gravelly loamy			0	0-15	001-09	20-95	35-75
				SM, SP-SM		_		_	_	
						_		_	_	

Table 23. -- Engineering Index Properties -- Continued

			Classification	cation	Fragments	ents	Per	Percentage	pass
Map symbol	Depth	USDA texture					Ω.	sieve number-	mber-
and soil name			Unified	OTHSAK	>10	3-10	4	10	40
	п					Pct			
671B:									
Spoonerhill	0-3	Sandy loam	SM, SC-SM, SC	SC A-2, A-4	0	0-15	85-100 80-95		55-75
	3-12	Gravelly sandy	SC-SM, SC, SM	SM A-1-b, A-2,	0	0-15	60-100 50-95	_	35-75
				A-4	_		_		
					_		_		
		loamy sand			_				
	12-16		SP-SM, SC-SM, A-1-b,	A-1-b, A-2	0	0-15	60-100 50-95	20-95	35-75
			SM, SC						
		sand, sandy							
	16-34	01	SM, SC-SM,	A-1-b, A-2	0	0-15	60-100 50-95	20-95	35-75
			SP-SM, SC						
					_				
	34-46	_	SP-SM, SM,	A-1-b, A-2	0	0-15	60-100 50-95	20-92	35-75
			SC-SM, SC						
		loamy sand			_ (	,			1
	46-80	Gravelly loamy		A-1-b, A-2	0	0-15	60-100   50-95	50-95	35-75
			SC-SM, SP-SM						
		sand, sand							
680B:									
Stanberry, stony	0-1	Highly	PT	A-8	0-5	0-7	100	100	-
		decomposed							
		plant material							
	1-3	Sandy loam,	SM, SC-SM,	A-2-4, A-4	0-5	0-7	90-100 85-100	85-100	55-95
		loam, fine						-	
		sandy loam					_	_	
	3-19	Sandy loam,	CL-ML, ML,	A-2-4, A-4	0-5	0-7	90-100 70-100	70-100	55-95
		loam, gravelly	SC-SM, SM						
		fine sandy			_		_	_	
		loam			_		_	_	
	19-24	Sandy loam,	SC-SM, SM	A-2-4, A-4	0-2	0-7	75-100 70-100	70-100	40-70
		gravelly sandy			_		_	_	
		loam			_		_	_	
	24-32	Sandy loam,	SC-SM	A-2-4, A-4	0-2	0-7	75-100 70-100 40-70	70-100	40-70
		gravelly sandy			_		_	_	
		loam			_		_	_	
	32-42	Loamy sand,	SM, SC-SM	A-1-b, A-2-4	0-2	0-7	75-100 70-100	70-100	35-75
		gravelly loamy							
					_				
	42-80	Loamy sand,	GC-GM, SC-SM, A-1-b, A-2-4	A-1-b, A-2-4	0-2	0-7	60-95	25-90	30-75
		gravelly loamy	SM, GM						
		sand							
		_			_		_	_	

Table 23.--Engineering Index Properties--Continued

	1		Classification	cation	Fragments	lents	Per	Percentage	pass
Map symbor	nebru	USDA CEXCUTE			7	3-10	 	sieve number-	- Jaguri
soil name			Unified	AASHTO	inches   inches	inches	4	10	40
	ų.				Pct	Pct			
Pence, stony	0-3	Sandy loam			0	0-15	80-100 75-100 50-85	75-100	50-85
	3-8	_	SM, SC-SM	A-2-4, A-4	0	0-15	80-100	75-100	45-95
		read, ine							
	8-15	Gravelly sandy	אמי-טא אמי	A-1-b A-2-4	c	0-15	55-100 50-100	50-100	30-95
	9	loam gandy			 -	1			
				1					
		loam							
	15-21	Gravelly coarse	GP-GM, SM,	A-1-b, A-3	0	0-15	45-100	40-95	20-70
		sand, loamv							
		sand							
	21-60	Stratified sand	SP-SM, SP,	A-2, A-3, A-1	0	0-15	45-100 40-95	40-95	15-65
			GP, GP-GM					_	
		gravelly							
		coarse sand	_		_		_		
Tipler	0-3	Sandy loam		A-2, A-4	0	0-7	80-100 75-100 30-90	75-100	30-90
4	3-5	Sandy loam,	SM. SC-SM	A-2, A-4	0	0-7	55-100 50-100	50-100	30-95
	) )	gravelly fine			 -				
		sandy loam,							
		loam							
	5-19	Sandy loam,	SC-SM, SC, SM	SM A-2, A-4	0	2-0	55-100 50-100	50-100	45-95
_		loam, gravelly	_		_		_	_	
		fine sandy					_		
		loam				1		-	(
	19-26	Sandy loam,		A-1, A-2, A-4	0	6-7	55-100 50-100 30-95	20-100	30-95
		line sandy	CL-ML, SC-SM						
		loam							
	26-33	Sandy loam,	SC-SM, CL-ML,	A-1, A-2, A-4	0	0-7	55-100 50-100	50-100	30-95
		fine sandy	SC, SM	ì	,				
		loam, gravelly							
			_		_		_	_	
							_		
	33-60	eq	sand   SP-SM, SP,	A-3, A-1, A-2	0	0-7	45-100 40-95	40-95	15-65
		to very	GP-GM, GP		_			_	
		gravelly	_					_	
		coarse sand			_			_	

Table 23. -- Engineering Index Properties -- Continued

May avmbol	Denth	USDA texture	Classif	Classification	Fragn	Fragments	Pe]	Percentage pass	pass
and	4				>10	3-10			
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	In				Pct	Pct			
706A:									
Winterfield	0-7	Very fine sandy	SM, SC-SM	A - 4	0	0	100	95-100 85-10	85-10
	7-60	Sand, gravelly	SP-SM, SM	A-1-b, A-2-4,	0	0	60-100	60-100 60-100 40-75	40-75
		sand, gravelly		A-3	_				
_		loamy sand,			_				
		loamy sand							
Totagatic	0 - 4	Fine sandy loam	SM, CL, ML,	A-4	0	0	100	100	70-85
			SC						
	4 - 8	Loamy fine	SM	A-2	0	0	100	100	50-80
		sand, loamy			_				
		sand, fine			_		_		
		sand, sand			_		_		
	8-17	Fine sand,	SM	A-2	0	0	100	100	50-80
		sand, loamy		_	_				
_		fine sand		_	_				
	17-28	Fine sand,	SM	A-2, A-3	0	0	100	100	50-80
		sand, loamy		_	_				
		sand, coarse		_	_				
		sand, mucky					_		
		sand		_	_				
	28-46	Sand, fine	SM	A-2, A-3	0	0	100	100	50-80
		sand, loamy							
		sand, mucky							
	46-70	•	SM	A-2, A-3	0	0	100	100	50-80
				_					
		sand, fine		_	_				
		sand, loamy		_	_				
		fine sand			_		_		
	70-80	Sand, coarse	SM	A-2, A-3	0	0	100	100	50-80
_		sand, fine		_	_		_		
		sand, loamy		_					
		sand, loamy		_					
. —		fine sand							

Table 23. -- Engineering Index Properties -- Continued

soil name   In   In   724A:   0-7   7-10   10-32   32-35   35-37   35-37   60   10-60		Unified				_		
11 name		Unified		>10	3-10			
			AASHTO	inches	inches	4	10	40
	   Silt     Silt     Silt     loam,   loam,			Pct	Pct			
	Silt     Silt     Silt     Silt     silty     loam     Loam,     loam							
7-10   7-10   10-32   32-35   35-37   35-37   37-60   3	Silt     Silt     Silt     silty     Loam     Loam,     loam	CI, CI-MI	A-4, A-6	0	0-7	95-100	95-100   90-100   90-1	90-1
10-32   32-35   35-37   37-60	Silt     silty   loam   Loam,   loam,   loam,	CL-ML	A-4	0	0-7	95-100	95-100   90-100   90-1	90-1
32-35	silty   loam  Loam,   loam,	GF.	A-6	0	0-7	95-100	90-100	90-1
32-35	loam  Loam,   loam,   loam							
32-35	Loam, loam, loam,			_	_	_		
35-37		SM, ML, CL,		0	0-7	55-100	45-100	35-9
35-37	_	ജവ	A-4, A-6	_				
35-37					_	_		
09-24-	Gravelly loamy	GP-GM, SP-SM,	A-1-b, A-3	0	0-7	30-100	30-100   25-100   25-7	25-7
09-24-60	sand, loamy	GM, SM	_	_	_	_		
09-12	sand, loamy		_			_	_	
	coarse sand,		_			_	_	
09-16	very gravelly		_			_	_	
37-60	loamy coarse							
37-60	sand							
	<u>0</u>	SP, SP-SM,	A-1, A-2, A-3	0	0-7	45-100 40-95	40-95	15-6
	to very	GP-GM, GP						
	gravelly							
	coarse sand							
						_		
Rock outcrop.								
	_		7					L
Sissabagama U-IO	Loamy	SC-SM, SM	A-2-4		<b>&gt;</b>	00T-06	001-08	00-0
T 10 10 10 10 10 10 10 10 10 10 10 10 10				>	>	00 T	001	100
31 - 45		WS	A-2 A-3	c	c	90-100	90-100 80-100 55-7	55-7
100	sand	1	1	,	,	9	) 	)
45-80		CL-ML, CL,	A-4	0	0	95-100	95-100 90-100 90-1	90-1
_	fine sand	SC-SM						
						_		
		E		(		0		7
Wozny			A-8	2-3	o ¦	001	00T	OOT
3-17	Silt		A-4	0-2	0-7	80-100	80-100 75-100 70-1	70-1
17-37	_			0-5	0-7	80-100	80-100 75-100	70-1
37-56	Stratified	SM, SC-SM	A-1, A-2	0-5	0-7	001-09	20-90	30-9
_	sandy loam to		_	_	_			
_	gravelly loam		_	_	_	_		
56-80	ᆜ	SM, SC-SM	A-1, A-2-4	0 - 5	0-7	60-100 50-90		25-7
_	gravelly loamy		_	_	_	_		
_	sand		_	_	_	_		

Table 23. -- Engineering Index Properties -- Continued

771A: In T71A:				Th: f: 60	-						
il name oot	_  <u>_</u> <u></u>			71 6100			>10	3-10			
000			Þ	וודדדוו	AA	AASHTO	inches	inches inches	4	10	40
000	_ <u> </u>						Pat	Pot			
	<u> </u>	7		70		ć		-	0	7 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	7
8-14		Loamy sand,	SM,	SP-SM	A-1,	A-2	0	0	60-95	60-95  50-90  25-70	25-70
8-14	- —	e sand,				ı					
8-14	_	gravelly sand,			_			_			
8 - 14 - 21		gravelly loamy									
8 - 14 11-2		coarse sand									
14-21	- =	Toamy coarse	Σ.	MS-GS	A-1	A-2. A-3	c	c	60-95	50-90	25-70
14-21		sand, coarse			ì :			· 	0	) )	)
14-21											
14-21											
14-21		sand, roamy									
14-21	_	salid						_		:	,
		Gravelly coarse	SM,	SP-SM	A-1,	A-2, A-3	o 	o 	60-95	06-09	25-65
		saila, graveriy									
_	_	sand, sand			_						
21-80	_	Stratified	SP-SM,	M, SM	A-2,	A-1, A-3	0	0	60-95	20-90	25-65
_	_	coarse sand to			_						
_	_	gravelly			_		_	_	_		
_	_	coarse sand			_		_				
_	_	_			_		_	_			
	_				_						
Scoba 0-9	_	loam	sc,	SM	A-2-4,	, A-4	0	6-0	80-100	80-100   75-100	
9-16	_	Sandy loam,	GM,	SC, SM	A-1-b,	, A-2-4,	0	6-0	55-100	55-100   50-100	35-80
	_	loam, gravelly			A-4						
-	-	fine sandy			_		_				
-	_	loam			_						
16-20	_	Sandy loam,	SM,	GM, SC	A-1-b,	, A-2-4,	0	6-0	55-100	50-100	35-75
		gravelly loam,			A - 4		_				
	-	fine sandy			_		_				
-	_	loam			_		_				
20-26	_	Sandy loam,	GM,	SC, SM	A-1-b,	, A-2-4,	0	6-0	55-100	55-100   50-100   35-75	35-75
-	_	gravelly loam,			A-4		_				
	_	fine sandy			_						
	_	_ meol									
		out the same	2	M.O	( 	,		0	201	30 100 25 100 15 80	0
TC-07	_			D.M.	# - F			0 - 40	00 T = 00 I	00T-C7	T0-00
	_	very gravelly			A-3						
		loamy coarse									
_	_	sand									
31-60	_	Stratified sand	GP,	sand GP, GP-GM,	A-1,	A-1, A-2, A-3	0	0-25	30-100 25-95	25-95	15-65
	_	to very	SP,	SP-SM							
-		gravelly					_				
-	_	coarse sand			_		_	_			
	-										

Table 23. -- Engineering Index Properties -- Continued

1 1 1 2 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Map symbol	Depth	USDA texture	Classif	Classification	Fragments	ents	Per	Percentage pass	pass
In name	and	ı				>10	3-10			
In   In   A-4   Silt loam   CL-ML, ML   A-4     4-13   Silt loam, silt   ML, CL-ML   A-4     13-19   Sandy loam   SCC, SM   A-1-b, A-2-4     10-am, gravelly   SC, SM   A-1-b, A-2-4     19-32   Sandy loam   SM, SC   A-1-b, A-2-4     10-am, gravelly   SM, SC   A-1-b, A-2-4     10-am, sandy   SP-SM, SM,   A-1, A-2-4     10-am, sandy   SC-SM   A-1, A-2-4     10-am, sandy   SM, SC   A-4     10-am, sandy   SM, SC   A-1-b, A-2-4     10-am, sandy   SM, SC   A-1-b, A-2-4     10-am, sandy   SM, SC   A-4     10-am, sandy   SM, SC   A-4     10-am, gravelly   SM, SC   A-1-b, A-2-4     10-am, gravelly   SM, SC   A-1-b, A-2-4     10-am, gravelly   SC-SM, SM   A-1, A-2-4     10-am, gravelly   SC-SM, SM   A-	soil name			Unified	AASHTO	inches	inches	4	10	40
13-19   Sailt loam   CL-ML, ML   A-4     4-13   Siilt loam, silt ML, CL-ML   A-4     10-am, silt ML, CL-ML   A-1-b, A-2-4     10-am, gravelly   SC, SM   A-1-b, A-2-4     19-32   Sandy loam   SM, SC   A-1-b, A-2-4     19-32   Sandy loam   SM, SC   A-1-b, A-2-4     10-am, sandy   SM, SC   A-1-b, A-2-4     10-am, sandy   SP-SM, SM,   A-1, A-2-4     10-am, sandy   SM, SC   A-1-b, A-2-4     10-am, sandy   SM, SC   A-1-b, A-2-4     10-am, sandy   SM, SC   A-1-b, A-2-4     10-am, sandy   SM, SC   A-1-b, A-2-4     10-am, sandy   SM, SC   A-1-b, A-2-4     10-am, gravelly   SM, SC   A-1-b, A-2-4     10-am, gravelly   SM, SC   A-1-b, A-2-4     10-am, gravelly   SM, SC   A-1-b, A-2-4     10-am, gravelly   SM, SC   A-1-b, A-2-4     10-am, gravelly   SM, SC   A-1-b, A-2-4     10-am, gravelly   SC-SM, SM   A-1, A-2-4     10-am, gravelly loam   CL-ML, ML   A-4     10-am, gravelly loam   CL-ML, ML   A-4     10-am, gravelly loam   CL-ML, SM   A-1, A-2-4     10-am, sandy loam   CL-ML, SM   A-1, A-2-4     10-am, sandy loam   CL-ML, SM   A-1, A-2-4     10-am, sandy loam   CL-ML, SM   A-1, A-2-4     10-am, sandy loam   CL-ML, ML   A-4     10-am, sandy loam   CL-ML, ML		ដ				Pct	Pct			
13-19   Silt loam   CL-ML, ML   A-4     13-19   Sandy loam, Silt   ML, CL-ML     13-19   Sandy loam, Silt   A-1-b, A-2-4     13-19   Sandy loam, Silt   A-1-b, A-2-4     13-24   Sandy loam   SM, SC   A-1-b, A-2-4     13-24   Sandy loam   SM, SC   A-1-b, A-2-4     13-24   Gravelly sandy   SM, SC   A-1-b, A-2-4     13-29   Sandy loam   SC-SM   A-1, A-2-4     13-29   Silt loam   Silt   CL-ML   A-4     13-29   Silt loam   Silt   CL-ML   A-4     13-29   Silt loam   SM, SC   A-1-b, A-2-4,     13-29   Silt loam   SM, SC   A-1-b, A-2-4,     13-29   Silt loam   SM, SC   A-4     13-30   Silt loam   SM, SC   A-4     13-41   Sandy loam   SM, SC   A-1-b, A-2-4,     13-41   Sandy loam   CL-ML, ML   A-4     13-41   Sandy loam   CL-ML, ML   A-4     13-42   Silt loam   CL-ML, ML   A-4     13-43   Silt loam   CL-ML, ML   A-4     13-41   Sandy loam   CL-ML, ML   A-4     13-41   Sandy loam   CL-ML, ML   A-4     13-55   Stratified   SC-SM, SM   A-1, A-2-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-4     13-75   Silt loam   CL-ML, ML   A-1, A-2-4     13-75   Silt loam   CL-ML, ML   A-1, A-2-4     13-75   Silt loam   CL-ML, ML   A-1, A-2-4     13-75   Silt loam   CL-ML, ML   A-1, A-2-4     13-75   Silt loam   CL-ML, ML   A-1, A-2-4     13-75   Silt loam   CL-ML, ML   A-1, A-2-4     13-75   Silt loam   CL-ML, ML   A-1, A-2-4     13-75   Silt loam   CL-ML, ML   A-1, A-2-4	8530:									
13-19   Sandy loam, Silt   Mil, Cir-Mil   A-4     13-19   Sandy loam, Silt   Mil, Cir-Mil   A-1-b, A-2-4     10am, gravelly   SM, SC   A-1-b, A-2-4     10am, gravelly   SM, SC   A-1-b, A-2-4     10am, gravelly   SM, SC   A-1-b, A-2-4     10am, sandy   SP-SM, SM, A-1, A-2-4     10am, loam   Silt loam, Silt   Cir-Mil, Mil   A-4     10am, loam   Cir-Mil, Cir-Mil   A-4     10am, gravelly   SM, SC   A-1-b, A-2-4,     29-34   Loam, silt   Mil, Cir-Mil   A-4     10am, gravelly   SM, SC   A-1-b, A-2-4,     10am, gravelly   SM, SC   A-1-b, A-2-4,     10am, gravelly   SM, SC   A-1-b, A-2-4,     10am, gravelly   SM, SC   A-1-b, A-2-4,     10am, gravelly   SM, SC   A-1-b, A-2-4,     10am, gravelly   SM, SC   A-1-b, A-2-4,     10am, gravelly   SM, SC   A-1-b, A-2-4,     10am, gravelly   SM, SC   A-1-b, A-2-4,     10am, gravelly   SC-SM, SM   A-1, A-2-4,     10am, gravelly loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil, Mil   A-4     17-37   Silt loam   Cir-Mil   A-4     17-37   Silt loam   Cir-Mil   A-4     17-37   Silt loam   Cir-Mil   A-4     17-37   Silt loam   Cir-Mil   A-4     17-37   Silt loam   Cir-Mil   A-4     17-37   Silt loam   Cir-Mil   A-4     17-37   Silt   Cir-Mil   A-4     17-37   Silt   Cir-Mil   A-4     17-37   Silt   Cir-Mil   Cir-Mil   A-4     17-37   Silt   Cir-Mil   A-4     17-37   Silt   Cir-Mil   A-4     17-37	Frogcreek	0 - 4			A-4	0-2	0 - 5	90-100	85-100	80-10
19-32   Sandy loam   SM, SC   A-1-b, A-2-4		4-L3	Silt loam, Silt		بر م	0 0	0 C	90-100 85-10C	85-100	0T-08
19-32   Sandy loam   SM, SC   A-1-b, A-2-4     19-32   Sandy loam   SM, SC   A-1-b, A-2-4     10am, garvelly   SM, SC   A-1-b, A-2-4     10am, sandy loam   SC-SM   A-1, A-2-4     10am, sandy loam   ML, CL-ML   A-4     10am, sandy loam   CL-ML   A-4     10am, garvelly   SM, SC   A-1-b, A-2-4     29-34   Loam, sllt   ML, CL-ML   A-4     10am, gravelly   SM, SC   A-1-b, A-2-4     L, ML   A-4     11-37   Silt loam   CL-ML, ML   A-4     11-37   Silt loam   CL-ML, ML   A-4     11-37   Silt loam   CL-ML, ML   A-4     11-37   Silt loam   CL-ML, ML   A-4     11-37   Silt loam   CL-ML, ML   A-4     11-37   Silt loam   CL-ML, ML   A-4     11-37   Silt loam   CL-ML, ML   A-4     11-37   Silt loam   CL-ML, ML   A-4     11-37   Silt loam   CL-ML, ML   A-4     11-37   Silt loam   CL-ML, ML   A-4     11-37   Silt loam   CL-ML, ML   A-4     11-37   Silt loam   CL-ML, ML   A-4     11-38   Sandy   C-SM, SM   A-1, A-2-4     11-39   Sandy   Sand		CT - CT	loam eilt		A - A	0	)	000	000	00-00-
19-32   Sandy loam   SM, SC   A-1-b, A-2-4     10-am, gravelly   SM, SC   A-1-b, A-2-4     10-am, gravelly   SM, SC   A-1-b, A-2-4     10-am, sandy loam   SC-SM   A-1, A-2-4     10-am, sandy   SC-SM   A-1, A-2-4     10-am, sandy   SC-SM   A-1, A-2-4     18-29   Silt loam   ML, CL-ML   A-4     18-29   Silt loam   SIL   CL-ML   A-4     18-29   Silt loam   SIL   CL-ML   A-4     18-29   Silt loam   SM, SC   A-1-b, A-2-4     10-am, gravelly   SM, SC   A-1-b, A-2-4     10-am, gravelly   SM, SC   A-1-b, A-2-4     10-am, gravelly   SM, SC   A-1     10-am, gravelly   SM, SC   A-1     10-am, gravelly   SC-SM, SM   A-1, A-2-4     10-am, gravelly   SC-SM, SM   A-1, A-2-4     10-am, gravelly   SC-SM, SM   A-1, A-2-4     11-37   Silt loam   CL-ML   A-4     11-37   Silt loam   CL-ML   A-4     11-37   Silt loam   CL-ML   A-4     11-37   Silt loam   CL-ML   A-4     11-37   Silt loam   CL-ML   A-4     11-37   Silt loam   CL-ML   A-4     11-37   Silt loam   CL-ML   A-4     11-37   Silt loam   CL-ML   A-4     11-37   Silt loam   CL-ML   A-4     11-37   Silt loam   CL-ML   A-4     11-37   Silt loam   CL-ML   A-4     11-37   Silt loam   CL-ML   A-4     11-37   Silt loam   CL-ML   A-4     11-38   Sirvatified   SC-SM, SM   A-1, A-2     10-amy sand   SC-SM, SM   A-1, A										
19-32   Sandy loam,   SM, SC   A-1-b, A-2-4						_				
loam, gravelly     sandy loam     32-46   Gravelly sandy   SM, SC     loam, sandy   SM, SC     loam, loamy   SP-SM, SM,   A-1, A-2-4     sand, loamy   SC-SM     4-8   Silt loamy   SC-SM     7-18   Silt loam, silt   CL-ML, ML   A-4     18-29   Silt loam, silt   CL-ML, CL   A-4     18-29   Silt loam, sandy   SM, SC   A-4     18-29   Silt loam, gravelly     18-29   Silt loam, gravelly     sandy loam   SM, SC   A-1-b, A-2-4,     sandy loam   SC-SM, SM   A-1, A-2-4     sandy loam   SC-SM, SM   A-1, A-2-4     sandy loam   SC-SM, SM   A-1, A-2-4     sandy loam   CL-ML, ML   A-4     sandy loam   SC-SM, SM   A-1, A-2-4     sandy loam   CL-ML, ML   A-4     sandy loam   CL-ML, ML   A-4     sandy loam   CL-ML, ML   A-4     3-17   Silt loam   CL-ML, ML   A-4     3-17   Silt loam   CL-ML, ML   A-4     3-26   Stratified   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam sand,   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   SC-SM, SM   SC-SM, SM     sandy loam to   SC-SM, SM   SC-SM, SM   SC-SM, SM     sandy loam to   SC-SM, SM   SC-SM, SM   SC-SM, SM     sandy loam to   SC-SM, SM   SC-SM, SM   SC-SM, SM     sandy loam to   SC-SM, SM   SC-		19-32	Sandy loam,			0-5	0-7	60-100	50-90	30-80
32-46   Gravelly sandy   SM, SC   A-1-b, A-2-4	_					_				
32-46   Gravelly sandy   SM, SC   A-1-b, A-2-4     10am, sandy   SC-SM   A-1, A-2-4     10am, sandy   SC-SM   A-1, A-2-4     sand, loamy   SC-SM   A-1, A-2-4     sand, loam, silt   CL-ML   A-4     18-29   Silt loam   CL-ML, CL   A-4     18-29   Silt loam   CL-ML, CL   A-4     18-29   Silt loam   CL-ML, CL   A-4     18-29   Silt loam   SM, SC   A-1-b, A-2-4,     sandy loam   SM, SC   A-1-b, A-2-4,     sandy loam   SC-SM, SM   A-1, A-2-4     sandy loam   SC-SM, SM   A-1, A-2-4     sandy loam   CL-ML, ML   A-4     , SM   A-1, A-2     sandy loam   SC-SM, SM   A-1, A-2     sand			sandy loam			_				
10am, sandy   10amy   10amy   10amy   10am, sandy   10amy   10amy   10amy   10amy   10amy   10amy   10amy   10amy   10amy   10am, silt loam, silt   10am, silt   10am, silt loam, silt   10am, silt   10am, silt loam, silt   10am, silt   10am, silt loam, silt loam, silt   10am, silt loam, silt loam, silt loam, silt loam, sandy loam   10am, gravelly   10am, gravelly   10am, gravelly   10am, gravelly   10am, gravelly   10am, gravelly   10am, gravelly   10am, gravelly   10am, gravelly   10am, gravelly loam, sand   11. a.2   11. a.2   11. a.3   11. a.3   11. a.4   11. a.4   11. a.5   11. a.4   11. a.5   12. a.4   11. a.4   11. a.5   13. a.4   11. a.5   13. a.4   11. a.5   13. a.4   11. a.5   13. a.4   11. a.5   13. a.4   11. a.5   13. a.4   11. a.5   13. a.4   11. a.5   13. a.4   11. a.5   13. a.4   11. a.5   13. a.4   11. a.5   13. a.4   11. a.5   14. a.5		32-46	Gravelly sandy		A-2	0-2	0-7	001-09	50-90	30-80
46-80   Gravelly loamy   SC-SM   Sand   Sand   Scand										
46-80   Gravelly loamy   SP-SM, SM,   A-1, A-2-4			loam, loam							
sand, loamy   SC-SM		46-80	Gravelly loamy		A-1, A-2-4	0-2	0-7	60-100 50-90	20-90	25-70
Sand   ML, CL-ML   A-4			sand, loamy	SC-SM						
Silt loam, silt CL-ML, ML   A-4     4-7   Silt loam, silt CL-ML, ML   A-4     7-18   Silt loam, silt   CL-ML, CL   A-4     18-29   Silt loam, sandy   SM, SC   A-1-b, A-2-4,     19-29   Silt loam, gravelly   SM, SC   A-1-b, A-2-4,     10-am, A-2-4,     10-am, sand   SC-SM, SM   A-1, A-2-4,     10-am, sand   SC-SM, SM   A-			sand							
4-7 Silt loam, silt CL-ML, ML 7-18 Silt loam, silt ML, CL-ML 18-29 Silt loam, clr. CL-ML, CL 29-34 Loam, sandy SM, SC A-1-b, A-2-4, 10-am, gravelly SM, SC A-1-b, A-2-4, 10-am, gravelly SM, SC A-1-b, A-2-4, 10-am, gravelly SM, SC A-1-b, A-2-4, 10-am, gravelly SC-SM, SM A-1, A-2-4 Sandy loam A-1-55 Loamy sand, SC-SM, SM A-1, A-2-4 Sand Sand SS-80 Loamy sand, SC-SM, SM A-1, A-2-4 Sand 17-37 Silt loam CL-ML, ML A-4 37-56 Stratified SC-SM, SM A-1, A-2 Sandy loam to SS-SM, SM A-1, A-2-4 Sandy loam to SG-SM, SM A-1, A-2-4 Sandy loam to SG-SM, SM A-1, A-2-4 Sandy loam to SG-SM, SM A-1, A-2-4 Sandy loam to SG-SM, SM A-1, A-2-4 Sandy loam to SG-SM, SM A-1, A-2-4 Sandy loam to SG-SM, SM A-1, A-2-4 Sandy loam to SG-SM, SM A-1, A-2-4 Sandy loam to SG-SM, SM A-1, A-2-4 Sandy loam to SG-SM, SM A-1, A-2-4 Sandy loam to SG-SM, SM A-1, A-2-4 Sandy loam to SG-SM, SM A-1, A-2-4	Stinnett	0 - 4	Silt loam		A-4	0-2	0-5	90-100	85-100	80-10
7-18 Silt loam, silt ML, CL-ML A-4  18-29 Silt loam, sandy SM, SC A-1-b, A-2-4, sandy loam  34-41 Sandy loam  41-55 Loamy sand, SC-SM, SM A-1, A-2-4  gravelly loamy  sand  55-80 Loamy sand, SC-SM, SM A-1, A-2-4  gravelly loamy  17-37 Silt loam  17-37 Silt loam  SC-SM, SM A-1, A-2  A-8  A-1, A-2-4  A-1, A-2-4  A-1, A-2-4  A-1, A-2-4  Bravelly loamy  CL-ML, ML A-4  A-1, A-2-4  Sandy loam to CL-ML, ML A-4  A-1, A-2-4  Sandy loam to CL-ML, ML A-4  Bandy loam to CL-ML, ML A-4  S56-80 Loamy sand, SC-SM, SM A-1, A-2-4  Sandy loam to CL-ML, ML A-4  S6-80 Loamy sand, SC-SM, SM A-1, A-2-4  Sandy loam to Sc-SM, SM A-1, A-2-4		4-7	loam,	CL-ML, ML	A-4	0-2	0-5	90-100		
18-29   Silt loam   CL-ML, CL   A-4     29-34   Loam, sandy   SM, SC   A-1-b, A-2-4,     sandy loam   Sandy loam     41-55   Loamy sand,   SC-SM, SM   A-1, A-2-4     sandy loam   , SM   A-1, A-2     sandy loam   SC-SM, SM   A-1, A-2     sandy loam   SC-SM, SM   A-1, A-2     sandy loam   SC-SM, SM   A-1, A-2     sandy loam   SC-SM, SM   A-1, A-2		7-18	loam,	ML, CL-ML	A-4	0-2	0-5	90-100	85-100 70-10	
19-34   Loam, sandy   SM, SC   A-1-b, A-2-4,   10am, gravelly   SM, SC   A-1-b, A-2-4,   sandy loam   34-41   Sandy loam   Sandy loam   A-1-5   Loamy sand,   SC-SM, SM   A-1, A-2-4   gravelly loamy   SC-SM, SM   A-1, A-2-4   sand   S5-80   Loamy sand,   SC-SM, SM   A-1, A-2-4   gravelly loamy   ST-SM, SM   A-1, A-2-4   sand   S1-17   Silt loam   CL-ML, ML   A-4   A-4   S1-17   Silt loam   CL-ML, ML   A-4   A-4   S-6-80   Stratified   SC-SM, SM   A-1, A-2   Sandy loam to   S6-80   Loamy sand,   SC-SM, SM   A-1, A-2-4   gravelly loam   S6-80   Loamy sand,   SC-SM, SM   A-1, A-2-4   gravelly loamy   Sand		18-29		CL-ML, CL	A-4	0-2	0-5	90-100	85-100	80-10
10am, gravelly   A-4     sandy loam   34-41   Sandy loam   SM, SC   A-1-b, A-2-4,     loam, gravelly   A-4     sandy loam   41-55   Loamy sand,   SC-SM, SM   A-1, A-2-4     sand   S5-80   Loamy sand,   SC-SM, SM   A-1, A-2-4     sand   S1-17   Silt loam   CL-ML, ML   A-4     17-37   Silt loam to   SC-SM, SM   A-1, A-2     sand   S6-80   Loamy sand,   SC-SM, SM   A-1, A-2     sand   S6-80   Loamy sand,   SC-SM, SM   A-1, A-2     sand   S6-80   Loamy sand,   SC-SM, SM   A-1, A-2-4     sand   and   Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand   Sand   Sand     Sand   Sa		29-34		SM, SC	-b, A-2	0-5	0-7	60-100 50-90	50-90	30-90
34-41   Sandy loam   SM, SC   A-1-b, A-2-4,   loam, gravelly   A-4   A-4   Sandy loam   A-4   Sandy loam   A-1-5   Loamy sand,   SC-SM, SM   A-1, A-2-4   gravelly loamy   SC-SM, SM   A-1, A-2-4   S-8   Gravelly loamy   SC-SM, SM   A-1, A-2-4   A-4										
34-41   Sandy loam,   SM, SC   A-1-b, A-2-4,   sandy loam   sandy loam   A-1-5   Loamy sand,   SC-SM, SM   A-1, A-2-4   gravelly loamy   SC-SM, SM   A-1, A-2-4   sand   S5-80   camy sand,   SC-SM, SM   A-1, A-2-4   sand   S-17   Silt loam   CL-ML, ML   A-8   S-17   Silt loam   CL-ML, ML   A-4   S-6-80   sand   SC-SM, SM   A-1, A-2   sand   S-6-80   sand   S-5-80   SC-SM, SM   A-1, A-2   sand   S-6-80   camy sand,   SC-SM, SM   A-1, A-2-4   gravelly loam   S-6-80   camy sand,   S-6-80   sand   S-6-80   sand   S-6-80   sand   S-6-80   sand   S-6-80   sand   S-6-80						_				
Loam, gravelly   A-4     sandy loam   A-1     sandy loam   A-1     gravelly loamy   A-1     sand   S5-80   Loamy sand,   SC-SM, SM   A-1, A-2-4     gravelly loamy   SC-SM, SM   A-1, A-2-4     sand   S-1   Silt loam   CL-ML, ML   A-4     17-37   Silt loam   CL, CL-ML   A-4     17-37   Silt loam   CL, CL-ML   A-4     sand   S-80   S-8M, SM   A-1, A-2     gravelly loam   SC-SM, SM   A-1, A-2-4     gravelly loamy   SC-SM, SM   A-1, A-2-4     sand   sand   S-3-4     S-3-4     S		34-41	Sandy loam,			0-5	0-7	60-100 50-90	50-90	30-90
41-55   Loamy sand,   SC-SM, SM   A-1, A-2-4     gravelly loamy   SC-SM, SM   A-1, A-2-4     sand   S5-80   Loamy sand,   SC-SM, SM   A-1, A-2-4     sand   Sand   A-1, A-2-4     sand   S-1, A-2-4     sand   S-1, A-2-4     sand   S-2, SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2     sandy loam to   SC-SM, SM   A-1, A-2-4     sandy loamy sand,   SC-SM, SM   A-1, A-2-4     sand   sand   S-3, SM   A-1, A-2-4     sand   S-3, SM   S-3, SM   A-1, A-2-4     sand   S-3, SM   S-3, SM   A-1, A-2-4     sand   S-3, SM   S-3, SM   A-1, A-2-4     sand   S-3, SM   S-3, SM   A-1, A-2-4     sand   S-3, SM   S-3, SM   A-1, A-2-4     sand   S-3, SM   S-3, SM   A-1, A-2-4     sand   S-3, SM   S-3, SM   S-3, SM     sand   S-3, SM   S-3, SM   S-3, SM     sand   S-3, SM   S-3, SM   S-3, SM     sand   S-3, SM   S-3, SM   S-3, SM     sand   S-3, SM   S-3, SM   S-3, SM     sand   S-3, SM   S-3, SM   S-3, SM     sand   S-3, SM   S-3, SM   S-3, SM     sand   S-3, SM   S-3, SM   S-3, SM     sand   S-3, SM   S-3, SM			loam, gravelly		A-4	_				
41-55   Loamy sand,   SC-SM, SM   A-1, A-2-4     gravelly loamy   SC-SM, SM   A-1, A-2-4     sand   S5-80   Loamy sand,   SC-SM, SM   A-1, A-2-4     gravelly loamy   SC-SM, SM   A-1, A-2-4     gravelly loamy   CL-ML, ML   A-4     17-37   Silt loam   CL-ML, ML   A-4     37-56   Stratified   SC-SM, SM   A-1, A-2     sandy loam to   Gravelly loamy     Gravelly loamy   SC-SM, SM   A-1, A-2-4     sand   sand   Sand   Sand     sand   Sand   Sand     sand   Sand   Sand     sand   Sand   Sand     sand   Sand   Sand   Sand     sand   Sand   Sand     sand   Sand   Sand   Sand     sand   Sand   Sand   Sand     sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand   Sand     Sand   Sand   Sand   Sand   Sand   Sand   Sand   Sand     Sand   Sa					_	_		_		
gravelly loamy   sand   sand   SC-SM, SM   A-1, A-2-4     55-80   Loamy sand,   SC-SM, SM   A-1, A-2-4     sand   Sand   PT   A-8     3-17   Silt loam   CL-ML, ML   A-4     17-37   Silt loam   CL, CL-ML   A-4     37-56   Stratified   SC-SM, SM   A-1, A-2     sandy loam to   SG-SM, SM   A-1, A-2     sandy loam to   SG-SM, SM   A-1, A-2     sandy loam y sand,   SG-SM, SM   A-1, A-2-4     sand	_	41-55	Loamy sand,		A-1, A-2-4	0-2	0-7	60-100   50-90	20-90	25-70
S5-80   Loamy sand,   SC-SM, SM   A-1, A-2-4     gravelly loamy   SC-SM, SM   A-1, A-2-4     sand   Sand   PT   A-8     17-37   Silt loam   CL-ML, ML   A-4     17-37   Silt loam   CL, CL-ML   A-4     37-56   Stratified   SC-SM, SM   A-1, A-2     sandy loam to   Grawy sand,   SC-SM, SM   A-1, A-2-4     56-80   Loamy sand,   SC-SM, SM   A-1, A-2-4     sand   sand			gravelly loamy							
55-80   Loamy sand,   SC-5M, SM   A-1, A-2-4     sand   sand		L							0	1
gravelly loamy   gravelly loamy		25-80	Loamy sand,			9-0	0-7	06-05 001-09	50-90	25-70
Sand   Sand			gravelly loamy							
3-17   Silt loam   CL-ML, ML   A-4     17-37   Silt loam   CL, CL-ML   A-4     17-37   Silt loam   CL, CL-ML   A-4     37-56   Stratified   SC-SM, SM   A-1, A-2     sandy loam to   Gravelly loam   SC-SM, SM   A-1, A-2     56-80   Loamy sand,   SC-SM, SM   A-1, A-2-4     sand   sand			sand							
3-17   Silt loam   CL-ML, ML   A-4     17-37   Silt loam   CL, CL-ML   A-4     37-56   Stratified   SC-SM, SM   A-1, A-2     sandy loam to   gravelly loam     56-80   Loamy sand,   SC-SM, SM   A-1, A-2-4     sand   sand	Wozny	0-3	Muck	PT	A-8	2-3	0	100	100	100
Silt loam   CL, CL-ML   A-4     Stratified   SC-SM, SM   A-1, A-2     sandy loam to   gravelly loam     Coamy sand,   SC-SM, SM   A-1, A-2-4     gravelly loamy   sand   sand	•	3-17	Silt loam	-MT.	A - 4	C .	0-7	0		-
Stratified SC-SM, SM A-1, A-2 sandy loam to gravelly loam Loamy sand, SC-SM, SM A-1, A-2-4 sand		17-37	Silt loam	CL. CL-ML	A-4-	0-12	0-7	80-100	75-100	70-10
sandy loam to gravelly loam   SC-SM, SM A-1, A-2-4 gravelly loamy sand	_	37-56	Stratified	SC-SM. SM		0-12	0-7	60-100   50-90	50-90	30-90
gravelly loamy   SC-SM, SM   A-1, A-2-4   gravelly loamy   sand	_		6			,				
Loamy sand, SC-SM, SM A-1, A-2-4 gravelly loamy sand			gravelly loam							
gravelly loamy	_	56-80	Toamy gand		A-1 A-2-4	0 - 2	7-0	60-100 50-90	50-90	25-70
sand			gravelly loamy		F-7-4 /T-4	) )	ì			0
			משטק ליום און שייני							
			5							

Table 23. -- Engineering Index Properties -- Continued

Map symbol	Depth	USDA texture	Classif	Classification	Fragn	Fragments	Per	Percentage pass	pass mber-
and	•				>10	3-10			
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	I				Pct	Pct			
856B:		- —							
Stinnett	0 - 4	Silt loam	CL-ML, ML	A-4	0-2	0-2	90-100 85-100	85-100	80-10
	4-7	Silt loam, silt	silt ML, CL-ML	A-4	0-2	0-5	90-100   85-100   70-10	85-100	70-10
	7-18	Silt, silt loam ML,	ML, CL-ML	A-4	0-2	0-5	90-100  85-100  70-10	85-100	70-10
	18-29	Silt loam	CL-ML, CL	A-4	0-2	0-5	90-100 85-100 80-10	85-100	80-10
	29-34	Loam, sandy	SM, SC	A-1-b, A-2-4,	0-5	0-7	60-100   50-90	_	30-90
		loam, gravelly		A-4					
	34-41		SM. SC	A-1-b, A-2-4,	0-5	0-7	60-100	20-90	30-90
	  -  -	loam, gravelly							
	. <u> </u>	sandy loam					_		
	41-55		SM, SC-SM	A-1, A-2-4	0-5	0-7	60-100 50-90	20-90	25-70
		gravelly loamy		. —	_		_	_	
	_	sand		_	_		_		
	55-80	Loamy sand,	SM, SC-SM	A-1, A-2-4	0 - 5	0-7	60-100   50-90	20-90	25-70
		gravelly loamy		_	_				
		sand							
857B:									
Frogcreek	0 - 4	Silt loam	ML, CL-ML	A-4	0-2	0-5	90-100 85-100 80-10	85-100	80-10
	4-13	Silt loam, silt	silt CL-ML, ML	A-4	0-2	0-5	90-100 85-100 80-10	85-100	80-10
	13-19	Silt loam,	SC, SM	A-1-b, A-2-4	0 - 5	0-7	60-100   50-90	_	30-90
		loam, sandy			_	_	_	_	
		loam, gravelly		_	_		_	_	
		sandy loam		_	_		_	_	
	19-32	Sandy loam,	SC, SM	A-1-b, A-2-4	0-2	0-7	60-100   50-90	20-90	30-80
		loam, gravelly		_	_		_	_	
		sandy loam		_	_		_	_	
	32-46	Gravelly sandy	SC, SM	A-1-b, A-2-4	0 - 5	0-7	60-100   50-90	20-90	30-80
		loam, sandy			_	_	_	_	
		loam, loam		_	_		_		
	46-80	Gravelly loamy	SM, SP-SM,	A-1, A-2-4	0 - 5	0-7	60-100   50-90	20-90	25-70
		sand, loamy	SC-SM	_	_		_	_	
		sand			_	_	_	_	
	_	_		_	_	_	_	_	

Table 23. -- Engineering Index Properties -- Continued

The color of the	Lodmys deM	Denth	TSDA texture	Classif	Classification	Fragments	nents	Per	Percentage pass	pass
11   10   10   10   10   10   10   10		1 1 1				>10	3-10	1		
In   In   In   In   In   In   In   In				Unified	AASHTO	inches	inches	_	10	40
19-13   Silt loam, silt ClML, ML		In				Pct	Pct			
13-13   Silt loam, silt CL-ML, ML   A-4   0-2   0-5   0-10   05-100     13-13   Silt loam, silt CL-ML, ML   A-4   0-5   0-7   60-100   05-100     13-13   Silt loam, sandy   CL-ML, ML   A-1-b, A-2-4   0-5   0-7   60-100   05-90     13-24   Sandy loam   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   05-90     13-25   Sandy loam   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   05-90     13-24   Sandy loam   SC-SM   A-1-b, A-2-4   0-5   0-7   60-100   05-90     14-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   60-100   05-90     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   60-100   05-90     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   60-100   05-90     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   60-100   05-90     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   05-90     15-80   Gravelly sandy   SC-SM   A-2-4, A-4   0-5   0-7   0-100   05-100     15-80   Gravelly sandy   SC-SM   A-2-4, A-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   0-100   0-100     15-80   Gravelly sandy	857C:									
13-19   Silt loam, sail CL-ML, ML	Frogcreek	0-4			A-4	0-2	0-5	90-100	85-100	80-10
13-19 Silt loam,   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90		4-13	loam,	CL-ML, ML	A-4	0-2	0-5	90-100	85-100	80-10
10-am, sandy   10-a		13-19	Silt loam,	SC, SM		0-2	0-7	001-09	_	30-90
19-32   Sandy loam   Sc, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90     19-32   Sandy loam   Sc, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90     10-am, gravelly   Sc, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90     10-am, sandy   Sc. SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90     10-am, sandy   Sc. SM   A-1, A-2-4   0-5   0-7   60-100   50-90     and, loam   Sc. SM   A-1, A-2-4   0-5   0-7   60-100   50-90     and, loam   Sc. SM   A-1, A-2-4   0-5   0-7   60-100   50-90     and, loam   Sc. SM   A-1, A-2-4   0-5   0-7   100   100     1-24   Sandy loam   Sc. SM   ML, A-2-4, A-4   0-5   0-7   75-100   70-100     19-24   Sandy loam   Sc. SM   A-2-4, A-4   0-5   0-7   75-100   70-100     19-24   Sandy loam   Sc. SM   A-2-4, A-4   0-5   0-7   75-100   70-100     19-24   Sandy loam   Sc. SM   A-2-4, A-4   0-5   0-7   75-100   70-100     19-24   Sandy loam   Sc. SM   A-2-4, A-4   0-5   0-7   75-100   70-100     19-24   Sandy loam   Sc. SM   A-2-4, A-4   0-5   0-7   75-100   70-100     19-25   Sandy loam   Sc. SM   A-2-4, A-4   0-5   0-7   75-100   70-100     19-26   Sandy loam   Sc. SM   A-2-4, A-4   0-5   0-7   75-100   70-100     19-26   Sandy loam   Sc. SM   A-2-4, A-4   0-5   0-7   75-100   70-100     19-26   Sandy loam   Sc. SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     19-27   Sandy loam   Sm   Sc. SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     19-28   Sandy loam   Sm   Sc. SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     19-29   Sandy loam   Sm   Sc. SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     19-20   Sandy loam   Sm   Sc. SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     19-20   Sandy loam   Sm   Sc. SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     19-20   Sandy loam   Sm   Sc. SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     19-20   Sandy loam   Sm   Sc. SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     19-20   Sandy loam   Sm   Sm   Sc. SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     19-20   Sandy loam   Sm   Sm   Sc. SM   A-1-b, A-2-4   0-5   0-7   75-100					_	_		_	_	
19-32   Sandy loam,   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90     10-am, gravelly   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90     10-am, sandy   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90     10-am, loam   SC-SM   A-1, A-2-4   0-5   0-7   60-100   50-90     and, loamy   SC-SM   A-1, A-2-4   0-5   0-7   60-100   50-90     and, loamy   SC-SM   A-1, A-2-4   0-5   0-7   60-100   50-90     and, loamy   SC-SM   A-1, A-2-4   0-5   0-7   60-100   50-90     and, loam, fine   SC-SM, SM   A-2-4, A-4   0-5   0-7   70-100     andy loam, fine   SC-SM, ML, A-2-4, A-4   0-5   0-7   70-100     andy loam, fine   SC-SM, ML, A-2-4, A-4   0-5   0-7   75-100   70-100     andy loam, gravelly   CL-ML, SM   A-2-4, A-4   0-5   0-7   75-100   70-100     are sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     are sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     are sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     are sandy loam,   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     are ally loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     are ally loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     and sandy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     are ally loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     and sandy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     and sandy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     and sandy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     and sandy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     and sandy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     and sandy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     and sandy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     and sandy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     and sandy   SM, SC-SM   SM, SC-SM   SM, SC-SM   SM, SC-SM   SM, SC-SM   SM, SC-SM   SM, SC-SM   SM, SM, SM, SM, SM, SM, SM, SM						_		_	_	
19-32   Sandy loam   Sc. SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90     32-46   Gravelly sandy   Sc. SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90     46-80   Gravelly loam   SP-SM, SM, A-1, A-2-4   0-5   0-7   60-100   50-90     46-80   Gravelly loam   SP-SM, SM, A-1, A-2-4   0-5   0-7   60-100   50-90     and, loam   SC-SM   A-1, A-2-4   0-5   0-7   60-100   50-90     and, loam   SC-SM   A-1, A-2-4   0-5   0-7   60-100   50-90     and, loam   SC-SM   SM   A-2-4, A-4   0-5   0-7   90-100     and, gravelly loam   SC-SM   A-2-4, A-4   0-5   0-7   90-100     and, gravelly loam   SC-SM   A-2-4, A-4   0-5   0-7   75-100     and, gravelly loam   SC-SM   A-2-4, A-4   0-5   0-7   75-100     and, gravelly loam   SC-SM   A-2-4, A-4   0-5   0-7   75-100     and, gravelly loam   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and, gravelly loam   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and, gravelly loam   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and, gravelly loam   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   sand   sand   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   sand   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   sand   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   sand   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   Sand   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   Sand   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   Sand   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   Sand   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100     and   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-10					_	_		_	_	
Sandy loam   Screen		19-32	Sandy loam,			0-2	0-7	001-09	20-90	30-80
32-46   Gravelly sandy   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90     Loam, loam   SP-SM, SM,   A-1, A-2-4   0-5   0-7   60-100   50-90     Loam, loamy   SP-SM, SM,   A-1, A-2-4   0-5   0-7   60-100   50-90     Sand, loamy   SC-SM   A-1, A-2-4   0-5   0-7   100   100     Loam, gravelly loamy   SC-SM, SM   A-2-4, A-4   0-5   0-7   100   85-100     Loam, gravelly candy   SC-SM, SM   A-2-4, A-4   0-5   0-7   75-100   70-100     Loam   Sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     Loam   Sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     Loam   Sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     Loam   Sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     Loam   Sandy loam,   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Gravelly sandy   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Gravelly loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Sandy loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Gravelly loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Gravelly loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Sandy loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Sandy loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Sandy loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Sandy loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Sandy loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Sandy loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     SANDY   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     SANDY   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     SANDY   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     SANDY   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     SANDY   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     SANDY   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     SANDY   SM, SC-SM						_				
32-46   Gravelly sandy   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90			sandy loam							
Loam, sandy   SP-SM, SM, A-1, A-2-4   0-5   0-7   60-100   50-90   sand, loamy   SC-SM   SP-SM, SM, A-1, A-2-4   0-5   0-7   60-100   50-90   sand, loamy   SC-SM   SP-SM, SM, A-1, A-2-4   0-5   0-7   60-100   50-90   Send, loam, gine   SC-SM, SM   A-2-4, A-4   0-5   0-7   90-100   85-100   SC-SM, SM   I-3   Sandy loam, Gravelly sandy   CL-ML, SM   A-2-4, A-4   0-5   0-7   90-100   70-100   SC-SM, SM   A-2-4, A-4   0-5   0-7   75-100   70-100   SC-SM, SM   A-2-4, A-4   0-5   0-7   75-100   70-100   SC-SM, SM   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100   SC-SM   SM, SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100   SC-SM   SM, SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100   SC-SM   SM, SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   SC-SM   SC-S		32-46	Gravelly sandy			0-2	0-7		20-90	30-80
46-8   Gravelly loamy   SP-SM, SM,   A-1, A-2-4   0-5   0-7   60-100   50-90										
March   Marc			Loam, Loam						0	L
Band, loamy   SC-SM   Band, loamy   SC-SM   Band, loamy   BT   BA-8   D-5   D-7   100   100   B5-100		46-80	Gravelly loamy			g-0	70	00T-09	06-09	25-70
Derry	_		_	SC-SM						
Highly   PT   A-8   0-5   0-7   100   100     decomposed			salla							
1-3   Early   PT   A-8   0-5   0-7   100   100     1-3   Sandy loam, fine   SC-SM, SM   A-2-4, A-4   0-5   0-7   90-100   85-100     1	873B:									
Deart material   Sandy loam,   CL-ML, ML,   A-2-4, A-4   0-5   0-7   90-100   85-100   10am, fine   SC-SM, SM   A-2-4, A-4   0-5   0-7   90-100   85-100   10am, gravelly cam,   SC-SM, ML,   A-2-4, A-4   0-5   0-7   90-100   70-100   10am, gravelly candy   A-2-4, A-4   0-5   0-7   75-100   70-100   10am   Sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100   10am   Sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100   10am   I0am	Stanberry	0-1	Highly	PT	A-8	0-5	0-7	100	100	-
Plant material   Sandy loam,   CL-ML, ML,   A-2-4, A-4   0-5   0-7   90-100   85-100   10-am, fine   SC-SM, ML,   A-2-4, A-4   0-5   0-7   90-100   85-100   10-am, gravelly sandy   CL-ML, SM   A-2-4, A-4   0-5   0-7   75-100   70-100   10-am   Sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100   10-am   Sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100   10-am   Sandy loam,   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   10-am   Sandy loam,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   10-am   Sandy loam,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   10-am   Sandy loam,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   55-100   70-100   10-am   Sandy loam,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   55-100   70-100   10-am   Sandy loam,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   55-100   70-100   10-am   Sandy loam,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   55-100   70-100   10-am   Sandy loam,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   55-100   70-100   10-am   Sandy loam,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   55-100   70-100   10-am   Sandy loam,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   55-100   70-100   10-am   Sandy loam,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   50-95   55-90   10-am   Sandy loam,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   50-95   55-90   10-am   Sandy loam,   SM, SC-SM   SM,			decomposed		_	_		_	_	
Sandy loam,   CL-ML, ML,   A-2-4, A-4   0-5   0-7   90-100   85-100     loam, fine   SC-SM, SM   A-2-4, A-4   0-5   0-7   90-100   85-100     loam, gravelly   CL-ML, SM   A-2-4, A-4   0-5   0-7   90-100   70-100     loam   Sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     gravelly sandy   A-2-4, A-4   0-5   0-7   75-100   70-100     gravelly sandy   A-1-b, A-2-4   0-5   0-7   75-100   70-100     gravelly loam,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     gravelly loamy   GM, GC-GM   A-1-b, A-2-4   0-5   0-7   50-95   55-90     gravelly loamy   GM, GC-GM   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   Sandy   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90			plant material		_	_		_	_	
loam, fine   SC-SM, SM   Sc-SM, SM   Sc-SM, ML,   A-2-4, A-4   0-5   0-7   90-100   70-100     fine sandy   CL-ML, SM   A-2-4, A-4   0-5   0-7   90-100   70-100     fine sandy   CL-ML, SM   A-2-4, A-4   0-5   0-7   75-100   70-100     gravelly sandy   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     gravelly sandy   A-2-4, A-4   0-5   0-7   75-100   70-100     loam   Loamy sand,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     sand   Loamy sand,   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   55-90     gravelly loamy   GM, GC-GM   A-1-b, A-2-4   0-5   0-7   55-90     gravelly loamy   GM, GC-GM   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   sand   SM, SC-GM   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90		1-3	Sandy loam,	CL-ML, ML,		0-2	0-7		85-100	55-95
Sandy loam   SC-SM, ML,   A-2-4, A-4   0-5   0-7   90-100   70-100     Loam, gravelly   CL-ML, SM     A-2-4, A-4   0-5   0-7   90-100   70-100     Loam   Sandy     A-2-4, A-4   0-5   0-7   75-100   70-100     Gravelly sandy     A-2-4, A-4   0-5   0-7   75-100   70-100     Gravelly sandy     A-2-4, A-4   0-5   0-7   75-100   70-100     Gravelly sand,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Gravelly loamy				SC-SM, SM	_	_		_		
Sandy loam,   SC-SM, ML,   A-2-4, A-4   0-5   0-7   90-100   70-100     Loam, gravelly   CL-ML, SM   A-2-4, A-4   0-5   0-7   90-100   70-100     Loam   Sandy   A-2-4, A-4   0-5   0-7   75-100   70-100     Gravelly sandy   A-2-4, A-4   0-5   0-7   75-100   70-100     Loam   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Gravelly loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Sand   Loamy sand,   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   55-100   70-100     Gravelly loamy   GM, GC-GM   A-1-b, A-2-4   0-5   0-7   55-90     Gravelly loamy   GM, GC-GM   GC-GM   GC-GM   GC-GM   GC-GM     Sand   Sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     Sand   Sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     Sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     Sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     Sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     Sand   SM, SC-SM,   SM,					_	_		_	_	
Loam, gravelly   CL-ML, SM		3-19	Н	SC-SM, ML,		0-2	0-7	90-100	70-100	55-95
fine sandy   Sandy				CL-ML, SM		_		_	_	
Joam   Sandy loam,   SM, SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     Joam   Sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     Joam   Loam   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Joam   Loam   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Joam   Sm, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Joam   Sm, SC-SM   A-1-b, A-2-4   0-5   0-7   55-100   70-100     Joam   Joam   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   55-100   70-100     Joam   Joam   SM, SC-SM   A-1-b, A-2-4   0-5   55-90     Joam   Joam   SM, SC-SM   A-1-b, A-2-4   0-5   55-90     Joam   Joam   SM, SC-SM   A-1-b, A-2-4   0-5   55-90     Joam   Joam   SM, SC-SM   A-1-b, A-2-4   0-5   55-90     Joam   Joam   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   50-95     Joam   Joam   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   50-95     Joam   Joam   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   50-95     Joam   Joam   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   50-95     Joam   Joam   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   50-95     Joam   Joam   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   50-95     Joam   Joam   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   50-95     Joam   J						_		_	_	
Sandy loam,   SM, SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     gravelly sandy   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     gravelly sandy   A-2-4, A-4   0-5   0-7   75-100   70-100     gravelly sand,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     gravelly loamy   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     gravelly loamy   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90     gravelly loamy   GM, GC-GM   A-1-b, A-2-4   0-5   0-7   50-95   55-90     gravelly loamy   GM, GC-GM   A-1-b, A-2-4   0-5   0-7   50-95   55-90     gravelly loamy   GM, GC-GM   A-1-b, A-2-4   0-5   0-7   50-95   55-90     gravelly sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   50-95   55-90			loam							
Sandy   Sc-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     Sandy loam,   SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Loamy sand,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100     Sand   Sm, SC-SM,   A-1-b, A-2-4   0-5   0-7   60-95   55-90     Sand   Sm, GC-SM,   A-1-b, A-2-4   0-5   0-7   60-95   55-90     Sand   Sm, SC-SM,   SC-SM,		19-24	Sandy loam,			0-2	0-7	75-100	70-100	40-70
Loam   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100     gravelly sandy			gravelly sandy							
Sandy loam,   SC-SM   A-2-4, A-4   0-5   0-7   75-100   70-100   gravelly sand,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   gravelly loamy   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   75-100   70-100   sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   60-95   55-90   gravelly loamy   GM, GC-GM   SA-2-4   0-5   0-7   60-95   55-90   sand   SA-2-4   SA			loam			_		_	_	
gravelly sandy   10am   loam		24-32	Sandy loam,	SC-SM		0-5	0-7	75-100	70-100	40-70
Loamy sand,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   gravelly loamy   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   75-100   70-100   Sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   60-95   55-90   gravelly loamy   GM, GC-GM   Sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   60-95   55-90   Sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   60-95   55-90   SAND			gravelly sandy		_	_		_	_	
Loamy sand,   SM, SC-SM   A-1-b, A-2-4   0-5   0-7   75-100   70-100   gravelly loamy   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   75-100   70-100     sand   SM, SC-SM,   A-1-b, A-2-4   0-5   0-7   60-95   55-90     gravelly loamy   GM, GC-GM     sand   sand   SM, SC-SM, SM, SM, SM, SM, SM, SM, SM, SM, SM,			loam		_	_		_	_	
gravelly loamy		32-42				0-5	0-7	75-100	70-100	35-75
sand			gravelly loamy							
Loamy sand,  SM, SC-SM,  A-1-b, A-2-4   0-5   0-7   60-95   55-90     gravelly loamy   GM, GC-GM			sand							
GM,		42-80				0-5	0-7	-	_	30-75
sand			gravelly loamy	GM, GC-GM						
			sand					_		

Table 23. -- Engineering Index Properties -- Continued

Man aymbol	Denth	HSDA texture	Classification	ication	Fragments	ents	Рег	Percentage pass	pass mber-
and	1 24 25				>10	3-10	i 		
soil name			Unified	AASHTO	Ø	inches	4	10	40
	In				Pct	Pot			
873C: Stanberry	0-1	Highly	PT	A-8	0 - 5	0-7	100	100	-
		decomposed   plant material							
	1-3	Sandy loam,	SC-SM, ML,	A-2-4, A-4	0-5	0-7	90-100 85-100		55-95
			CL-ML, SM		_			_	
_	2 1 0	sandy loam	TW. TW.	- 2 - 4 N - 4		- 1	00-100 70-100 55-95	1001	п п о
	1	loam, gravelly	SC-SM, SM		) )		9		
		02							
_	19-24	Sandy loam,	SC-SM, SM	A-2-4, A-4	0-5	0-7	75-100 70-100	70-100	40-70
		gravelly sandy							
	24-32	Sandy loam	W C.W.	A-2-4 A-4	2-0	0-7	75-100   70-100	70-100	40-70
	1				- — ) - —		) )		) )
								_	
	32-42	Loamy sand,	SM, SC-SM	A-1-b, A-2-4	0-2	0-7	75-100 70-100	70-100	35-75
		sand						_	
	42-80	Loamy sand,	GC-GM, GM,	A-1-b, A-2-4	0-5	0-7	60-95	55-90	30-75
		gravelly loamy	SC-SM, SM		_				
		sand							
873D:									
Stanberry	0-1	Highly	PT	A-8	0-5	0-7	100	100	-
		decomposed   plant material							
	1-3	Sandy loam,	SC-SM, CL-ML,	A-2-4, A-4	0-5	0-7	90-100	85-100	55-95
`		loam, fine	ML, SM		_				
_	3 - L 9	Sandy Loam,	SM, SC-SM,	A-2-4, A-4	ر د - 0	/-0	56-55   00T-07   00T-06	00T-0/	<b>カカーソカ</b>
		ເດ							
							_	_	
	19-24	Sandy loam,	SM, SC-SM	A-2-4, A-4	0-2	0-7	75-100 70-100 40-70	70-100	40-70
		gravelly sandy							
_	24-32	Loam Sandy loam	Min - C	A-2-4 A-4	٠ - ٦	0-7	75-100   70-100   40-70	70-100	40-70
	1				) 				
		loam			_		_	_	
	32-42	Loamy sand,	SM, SC-SM	A-1-b, A-2-4	0-5	0-7	75-100 70-100	70-100	35-75
		gravelly loamy							
	42-80	Loamy sand,	SM. SC-SM.	A-1-b, A-2-4	0-5	0-7	60-95	55-90	30-75
			GM, GC-GM						
		sand			_			_	
_		_			_		_	_	

Table 23. -- Engineering Index Properties -- Continued

May a com	   Denth	TISDA	מאוולאפל בתצוו	Classif	Classification	Fragn	Fragments	Ъег	Percentage pass	pass
and	: 24 ) )					>10	3-10	2		
soil name				Unified	AASHTO	inches	inches inches	4	10	40
	п					Pct	Pct			
905A:										
Cublake	0-3	Loamy	sand	SM	A-2	0	0	80-100	80-100 75-100	50-75
	3-4	Loamy	sand,	SM	A-2-4	0	0	80-100	80-100   75-100	50-80
		sand,	loamy							
			sand							
	4-23		sand,	SM	A-2-4	0	0	80-100	80-100 75-100	50-80
			Loamy							
			sand		·		,		1	
	23-32	Sand,	fine	SM	A-3	0	0	80-100	80-100 75-100	50-70
		sand,	loamy							
						_				
	32-40	Sand,		SM	A-3	0	0	80-100	80-100 75-100	50-70
	40-48	Fine sand,	and, sand SM	SM	A-3	0	0	80-100	80-100 75-100 50-70	50-70
	48-60	Stratified	fied very	SC-SM, CL,	A-4, A-6	0	0	95-100	95-100   90-100	75-10
		fine	sandy	CL-ML						
	_	loam	to silt		_	_				
	_	loam			_	_		_		
926A:							,		,	
Flink	0-3		sand	SM	A-2	0	0	001-06	001-38 001-06	60-75
	3-6		loamy	SM	A-3	0	0	90-100	85-100	55-70
		sand,	loamy							
			sand			_		_		
	6-9	Sand,	loamy	SM	A-3	0	0	90-100	85-100	55-70
		sand,	loamy			_				
		fine	sand		_	_				
	9-26	Sand,	loamy	SM	A-3	• •	0	90-100	90-100 85-100	55-70
		sand,	loamy		_	_				
		fine	sand		_	_				
	26-35	Sand,	fine sand SM	SM	A-3	0	0	001-06	90-100 85-100	55-70
	35-46	Sand,	fine sand	SM	A-3	0	0	90-100	85-100	55-70
	46-52	Stratified	fied silt	CL, CL-ML,	A-4, A-6	0	0	90-100	85-100	80-10
		to si	to silty clay	SC-SM	_	_				
	_	loam			_	_				
	52-80	Strati	fied silt	Stratified silt CL-ML, CL,	A-4, A-6	0	0	001-06	90-100   85-100	75-95
		to si	to silty clay	SC, SC-SM	_	_				
	_	loam	loam to loamy		_	_				
		very	very fine sand							

Table 23. -- Engineering Index Properties -- Continued

			Classification	ication	Fragi	Fragments	Per	Percentage pass	pass
Map symbol	Depth	USDA texture					01	sieve number-	mber-
and					>10	3-10			
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	п				Pot	Pct			
943D:									
Stanberry	0-1	Highly	PT	A-8	0-5	0-7	100	100	
		decomposed			_				
		plant material							
	1-3	Sandy loam,	CL-ML, ML,	A-2-4, A-4	0-5	0-7	90-100	90-100 85-100 55-95	55-95
		loam, fine	SC-SM, SM						
		sandy loam		_	_				
	3-19	Sandy loam,	SM, ML,	A-2-4, A-4	0 - 5	0-7	90-100	90-100   70-100	55-95
		loam, gravelly	CL-ML, SC-SM	_	_				
		fine sandy			_				
		loam		_	_				
	19-24	Sandy loam,	SM, SC-SM	A-2-4, A-4	0-5	0-7	75-100	75-100   70-100   40-70	40-70
		gravelly sandy			_				
		loam			_				
	24-32	Sandy loam,	SC-SM	A-2-4, A-4	0 - 5	0-7	75-100	75-100   70-100   40-70	40-70
		gravelly sandy			_			_	
		loam			_				
	32-42	Loamy sand,	SC-SM, SM	A-1-b, A-2-4	0-5	0-7	75-100	75-100   70-100   35-75	35-75
		gravelly loamy			_		_		
		sand			_				
	42-80	Loamy sand,	SM, GM,	A-1-b, A-2-4	0 - 5	0-7	96-09	25-90	30-75
		gravelly loamy	SC-SM, GC-GM		_				
		sand							
Greenwood	9-0	Д + к + к	Εd	- A	c	c	100	100	
3))))	, (	3 .	+ E			, (	0 0	0 0	
	0 9 - 9	Mucky peat	ΡΤ	8 - 8	o 	o	001	00 T	-
_		_			_				

Table 23.--Engineering Index Properties--Continued

	1		Classif	Classification	Fragi	Fragments	Per	Percentage pass	pass
map symbor and	Deptri	ומתש ופצרתו –			>10	3-10		reve mumber-	- TAGIII
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	u I				Pct	Pct			
948A:									
Billyboy	0 - 4	Silt loam	CL-ML, ML	A-4	0	0-7	95-100	95-100   90-100   70-10	70-10
	4-11	Silt loam	CL-ML, ML	A-4	0	0-7	95-100	95-100   90-100   70-10	70-10
	11-20	Silt loam	CL-ML, ML	A-4	0	0-7	95-100	95-100   90-100   70-10	70-10
	20-26	Loam, gravelly	ML, SC, CL,	A-1-b, A-2,	0	0-7	001-09	60-100   55-100   30-90	30-90
	_	sandy loam,	SM	A-4	_		_	_	
	_	very gravelly		_	_		_	_	
	_	fine sandy		_	_		_	_	
		loam					_		
	26-30	Sandy loam,	CI, SM, SC,	A-1-b, A-2,	0	0-7	001-09	60-100   55-100   30-90	30-90
	_	gravelly loam,	ML	A-4	_			_	
	_	very gravelly		_	_			_	
	_	fine sandy		_	_		_	_	
	_	loam	_	_	_			_	
	30-35	Loamy sand,	SM, GM	A-1-a, A-2,	0	0-7	45-100 40-95	_	15-75
	_	gravelly loamy		A-3	_			_	
	_	coarse sand,		_	_			_	
	_	very gravelly		_	_			_	
	_	loamy sand,		_	_		_		
		extremely							
	_	gravelly		_	_		_	_	
	_	coarse sand		_	_			_	
	35-60	Stratified sand	SP-SM, SP,	A-1, A-2, A-3	0	0-7	45-100 40-95	40-95	15-65
	_	to very	GP-GM, GP	_	_			_	
	_	gravelly	_	_	_			_	
	_	coarse sand		_	_			_	
	_			_	_			_	

Table 23. -- Engineering Index Properties -- Continued

970C:  Keweenaw 2-4   Sandy   S	Sandy loam	היי הן		>10	3-10	1		
il name In		Thified						
enaw  2-4   S   4-16   S   16-20   L		500111100	AASHTO	inches	inches inches	4	10	40
enaw				Pct	Pct			
2 - 4 - 1 - 1 - 2 - 4 - 1 - 2 - 4 - 1 - 2 - 4 - 1 - 2 - 4 - 1 - 2 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3								
<u></u>	dr. loam	SC, SM, SC-SM A-2		0-2	0-20	90-100   75-100   55-80	75-100	55-80
<u></u>	dy roam,	SC, SC-SM, SM A-1-b,	A-1-b, A-2,	0	0-20	85-100   65-100   45-75	65-100	45-75
	cobbly loamy	_	A-2-4	_		_	_	
<u>~</u>	sand, loamy	_		_		_	_	
<u>a</u>	sand, gravelly			_			_	
- <u>n</u>	loamy fine							
<u> </u>	nd			_				
	Sandy loam,	SM, SC-SM, SC	SC-SM, SC A-2, A-1-b,	0	0-25	85-100 65-100		45-75
<u>=</u>	cobbly loamy		A-2-4					
	fine sand,							
<del>-</del>	loamy sand,			_				
_=-	gravelly loamy							
<u> </u>	nd							
ф — — — — — — — — — — — — — — — — — — —	Loamy sand,	SC-SM, SP-SM, A-2, A-1-b	A-2, A-1-b	0	0-25	85-100 65-100	65-100	45-75
	cobbly loamy	SM, SC						
fin	fine sand,							
grb	gravelly loamy			_				
nes —	sand, sand							
1 20-27 T.oam	Loamy gand.	M.S D.S.	A-1-h. A-2.	c	0-25	85-100 65-100	65-100	45-75
	cobbly sand		A-2-4		,			)
		10 /10						
10 4 50 4	gravelly loamy							
	rine sand			_ (	L		L	0
27-43   Sand,	a, copply		A-3, A-I-D,	>	0-25	00T-68	00T-69	40-80
Loa	loamy sand,	SC-SM, SC	A-2, A-2-4	_				
gra	gravelly loamy							
fin	fine sand,							
as	sandy loam			_			_	
43-75   Loam	Loamy sand,	SC, SC-SM, SM	SM A-1-b, A-2,	0	0-25	85-100   65-100	65-100	45-80
san	sandy loam,	_	A-2-4	_		_		
gra	gravelly loamy							
fin	fine sand,							
fine	ne sandy			_				
loam	am							
75-80 Loam	Loamy sand,	SM, SP-SM,	A-1-b, A-2,	0	0-25	85-100 65-100	65-100	45-75
_	gravelly loamy		A-2-4					
יים איים	nd cobbly		ı !					
	DII.							

Table 23. -- Engineering Index Properties -- Continued

		_	Classif	Classification	Fragm	Fragments	Per	Percentage pass	pass
Map symbol	Depth	USDA texture					<u></u>	sieve number-	mber-
and			_	_	>10	3-10			
soil name			Unified	AASHTO	inches	inches inches	4	10	40
	H				Pct	Pct			
970C:									
Pence	0-3	Sandy loam	SM	A-4	0	0-15	80-100	80-100 75-100 50-85	50-85
	3-8	Sandy loam,	SC-SM, SM	A-2-4, A-4	0	0-15	80-100	80-100   75-100   45-95	45-95
_		loam, fine	_	_			_	_	
		sandy loam,	_	_			_		
		loamy sand							
_	8-15	Gravelly sandy	SM, SC-SM	A-1-b, A-2-4,	0	0-15	55-100	55-100   50-100   30-95	30-95
_		loam, sandy	_	A-4			_		
_		loam, loam,	_	_			_		
		fine sandy	_	_			_		
_		loam	_	_			_		
_	15-21	Gravelly coarse GM, GP-GM,	GM, GP-GM,	A-1-b, A-3	0	0-15	45-100 40-95		20-70
		sand, loamy	SP-SM, SM	_			_		
_		sand, sand,	_	_			_	_	
_		loamy fine	_	_			_	_	
_		sand	_	_			_		
	21-60	Stratified sand GP, GP-GM,	GP, GP-GM,	A-1, A-2, A-3	0	0-15	45-100 40-95	40-95	15-65
_		to very	SP, SP-SM	_			_	_	
_		gravelly	_	_			_	_	
		coarse sand							
Greenwood	9-0	Peat	PT	A-8	0	0	:	;	;
	09-9	Mucky peat	PT	A-8	0	0	-	:	;
			_	_					

Table 23. -- Engineering Index Properties -- Continued

In	Man symbol	Denth	USDA texture	Classif	Classification	Fragn	Fragments	Per	Percentage pas	pas mber
In name   In	and	d d				>10	3-10	o 	) )	
In   Per   Per	soil name			Unified	AASHTO	inches	inches		10	40
enaw  2-4 Gravelly loamy SC, SC-SM, SM A-2  (cobbly loamy SC, SC-SM, SM A-1-b, A-2, 0 0-50  fine sand, sandy  10-am sandy  4-16 Loamy sand, SC-SM, SM, SC A-2, A-1-b, 0 0-25  sand sandy  16-20 Loamy fine  sand, sandy  16-20 Loamy sand, SC-SM, SM, A-2, A-1-b, 0 0-25  Gobbly loamy  fine sand, SC-SM, SM, A-1-b, A-2, 0 0-25  Cobbly loamy  fine sand, SC-SM, SM, A-1-b, A-2, 0 0-25  Cobbly sand, SC-SM, SM, A-1-b, A-2, 0 0-25  Gobbly sand, SC-SM, SM, A-1-b, A-2, 0 0-25  Ioamy sand, SC-SM, SM, A-1-b, A-2, 0 0-25  Ioamy sand, SC-SM, SC, A-1-b, A-2, 0 0-25  Ioamy sand, SC-SM, SC, SM A-1-b, A-2, 0 0-25  Ioamy sand, SC-SM, SC, SM A-1-b, A-2, 0 0-25  Ioamy sand, SC-SM, SC, SM A-1-b, A-2, 0 0-25  sandy loam, SC-SM, SC, SM A-1-b, A-2, 0 0-25  sandy loam, SC-SM, SC, SM A-1-b, A-2, 0 0-25  sandy sand, SC-SM, SC, SM A-1-b, A-2, 0 0-25  gravelly loamy  fine sandy  loamy gravelly sand, SC-SM, SC, SM A-1-b, A-2, 0 0-25  sandy cobbly  sand  75-80 Loamy sand, SC-SM, SC, A-1-b, A-2, 0 0-25  gravelly loamy  sand, cobbly  sand  75-80 Loamy sand, SM-SM, A-1-b, A-2, 0 0-25  gravelly loamy  sand, cobbly  sand, cobbly  sand, cobbly  sand, cobbly  sand, cobbly  sand, cobbly  sand, cobbly  sand, cobbly  sand, cobbly  sand, cobbly  sand, cobbly  sand, sand		H				Pct	Pct			
2-4 Gravally loamy SC, SC-SM, SM A-1-b, A-2, Cobbly loamy sand, sandy loam, Gross, SM, SM, SC A-2-4 Cobbly loamy sand, sandy loam, Grobbly loamy sand, SSC-SM, SM, SC A-2-4 Cobbly loamy sand, SP-SM, SM, A-1-b, A-2, Cobbly loamy sand, SP-SM, SM, A-1-b, A-2, Cobbly loamy sand, SC-SM, SC A-2-4 Cobbly loamy sand, SC-SM, SC A-2-4 Cobbly loamy sand, SC-SM, SC A-2-4 Cobbly loamy sand, SC-SM, SC A-2-4 Cobbly loamy sand, SC-SM, SC A-2-4 Cobbly loamy sand, SC-SM, SC A-2-4 Cobbly loamy sand, SC-SM, SC A-2-4 Cobbly loamy sand, SC-SM, SC A-2-4 Cobbly loamy sand, SC-SM, SC A-2-4 Cobbly loamy sand, SC-SM, SC A-2-4 Cobbly loamy sand, SC-SM, SC A-2-4 Cobbly loamy sand, SC-SM, SC A-2-4 Cobbly loam, fine sand, sandy loam sand, SC-SM, SC, SM-1-b, A-2, Cobbly loam, fine sand, SC-SM, SC, SM-1-b, A-2, Cobbly loam, sandy loam sand, SC-SM, SC, SM-1-b, A-2, Cobbly loam, sand, SC-SM, SC, A-1-b, A-2, Cobbly loamy sand, SC-SM, SC, A-1-b, A-2, Cobbly loam, sand, SC-SM, S	970E:	0-0	מפטן אָלָּעפּטּ	Z Z	<del>-</del>		0-20	001-100	75-100	ת מ
fine sand,  cobbly loamy  sand, loamy  sand, sandy  loamy sand,  sand, cobbly  sand, cobbly  fine sand,  loamy sand,  sand, cobbly  sand, sand,  sand, cobbly  sand, sand,  loamy sand,  sand, sand,  loamy sand,  sand, sand,  loamy sand,  sand, sand,  sand, loam,  fine sand,  loamy sand,  sand, sand,  sand, sand,  sand, sand,  sand, sand,  sand, sand,  sand, sand,  sand, sand,  sand, sand,  sand, sand,  sand, sand,  sand, cobbly  sand, sand,  sand, sand,  sand, sand,  sand, sand,  sand, cobbly  sand, cobbly  sand, sand,		0 6	Gravelly loamy	SC-SM,		0	0-50	85-100	65-100	45-7
cobbly loamy         Sc-SM, SM, SC   A-2, A-1-b, on one sand, sand, loam         SC-SM, SM, SC   A-2, A-1-b, on one sand, loam, sand, loam         SC-SM, SM, SC   A-2, A-1-b, one one sand, loamy fine         0 0-25           sandy loam, gravelly loamy fine sand, cobbly sand, sand loamy sand, sand, sand, sand, sand, some cobbly sand, scopely scopely sand, scopely sand, scopely sand, scopely sand, scopely scopely scopely sand, scopely sand, scopely scopely scopely scopely scopely scopely scopely      SC-SM, SC   A-2, A-1-b, loamy         0 0-25           fine sand, sand         SC-SM, SC   A-2, A-1-b, loamy         0 0-25           cobbly loamy         SC-SM, SC   A-2, A-1-b, loamy         0 0-25           gravelly loamy         SC-SM, SC   A-2, A-1-b, loam, loam, loam, gravelly loamy         SC-SM, SC   A-2, A-2, loamy           fine sand, sand, sand, sand, loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loam, gravelly loamy fine sand         SC-SM, SC, SM A-1-b, A-2, loamy sand, sand, sand         SC-SM, SC, A-1-b, A-2, loamy sand,			cobbly loamy			_		_	_	
Sand, sandy   SC-SM, SM, SC   A-2, A-1-b,   O   O-25     sandy loam,   SC-SM, SM, SC   A-2, A-1-b,   O   O-25     sandy loamy fine   SP-SM, SM,   A-2, A-1-b   O   O-25     loamy fine   SC-SM, SC   A-2, A-1-b   O   O-25     cobbly loamy   SC-SM, SC   A-2, A-1-b   O   O-25     cobbly sand,   SP-SM, SM,   A-1-b, A-2,   O   O-25     cobbly sand,   SC-SM, SC   A-2-4     fine sand   SC-SM, SC   A-2, A-2-4     fine sand,   SC-SM, SC   A-2, A-2-4     fine sand,   SC-SM, SC   A-2, A-2-4     fine sand,   SC-SM, SC   A-2, A-2-4     fine sand,   SC-SM, SC   SM   A-1-b, A-2,   O   O-25     sandy loam,   SC-SM, SC,   SM   A-1-b, A-2,   O   O-25     sandy loam,   SC-SM, SC,   SM   A-1-b, A-2,   O   O-25     coamy fine   Sand,   SC-SM, SC,   SM   A-1-b, A-2,   O   O-25     gravelly loamy   SM, SP-SM   A-2-4     sand, cobbly   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     sand, cobbly   A-2-4     sand, cobbly   A-2-4     sand, cobbly   A-2-4     sand, cobbly   A-2-4     sand, cobbly   A-2-4     sand, cobbly   A-2-4     sand, cobbly   A-2-4     sand, cobbly   A-2-4     sand, cobbly   A-2-4     sand, cobbly   A-2-4     sand, cobbly   A-2-4     sand, cobbly   A-2-4     sand, cobbly   A-2-4	_		sand, loamy		_	_		_	_	
Loamy sand,   SC-SM, SM, SC   A-2, A-1-b,   0   0-25     sandy loam,   A-2-4     sandy loamy fine   SP-SM, SM,   A-2, A-1-b   0   0-25     loamy fine   SC-SM, SM,   A-2, A-1-b   0   0-25     cobbly loamy   SC-SM, SC   A-2, A-1-b   0   0-25     cobbly loamy   SC-SM, SC   A-2-4     cobbly sand,   SP-SM, SM,   A-1-b, A-2,   0   0-25     cobbly sand,   SC-SM, SC   A-2-4     fine sand   SC-SM, SC   A-2, A-2-4     fine sand,   SC-SM, SC   A-2, A-2-4     fine sand,   SC-SM, SC   A-2-4     fine sand,   SC-SM, SC, SM   A-1-b, A-2,   0   0-25     sandy loam   SC-SM, SC, SM   A-1-b, A-2,   0   0-25     coamy sand,   SC-SM, SC, SM   A-1-b, A-2,   0   0-25     sandy loam   SC-SM, SC, SM   A-1-b, A-2,   0   0-25     coamy sand,   SC-SM, SC,   A-1-b, A-	_				_	_		_		
Loamy sand,   SC-SM, SM, SC A-2, A-1-b,   0   0-25     sandy loam,   A-2-4	_		loam		_	_		_		
gravelly loamy         A-2-4           gravelly loamy         A-2-4           loamy fine         A-2.4           sand         SP-SM, SM, A-2, A-1-b         0           loamy sand, gravelly loamy         SC-SM, SC           gravelly loamy         SC-SM, SM, A-1-b, A-2, O         0           gravelly loamy         SC-SM, SC         A-2-4           gravelly loamy         SC-SM, SC         A-2-4           gravelly loamy         SC-SM, SC         A-2, A-2-4           gravelly loamy         SC-SM, SC, SM A-1-b, A-2, O         0           fine sand, sand, sand, sand, loam, gravelly         SC-SM, SC, SM A-1-b, A-2, O         0           fine sandy         A-2-4         O           fine sandy         SC-SM, SC, SM A-1-b, A-2, O         0           fine sandy         Sc-SM, SC, SM A-1-b, A-2, O         0           loamy fine         Sandy loam, gravelly         A-2-4           loamy fine         Sand           sand         SC-SM, SC, SM A-1-b, A-2, O         0           gravelly loamy         SM, SP-SM         A-1-b, A-2, O         0           sand, cobbly         SM, SP-SM         A-1-b, A-2, O         0	_	4-16	Loamy sand,	SC-SM, SM, SC	A-2, A-1-b,	0	0-25	85-100	65-100	45-7
Stavelly loamy   Stand, cobbly   SP-SM, SM,   A-2, A-1-b   0   0-25     Loamy fine   SP-SM, SM,   A-2, A-1-b   0   0-25     Cobbly loamy   SC-SM, SC   A-2   A     Cobbly sand,   SP-SM, SM,   A-1-b, A-2,   0   0-25     Cobbly sand,   SC-SM, SC   A-2   A     Gravelly loamy   SC-SM, SC   A-2, A-2     Cobbly sand,   SC-SM, SC   A-2, A-2     Cobbly sand,   SC-SM, SC   A-2, A-2     Cobbly sand,   SC-SM, SC   A-2, A-2     Commy Commy sand,   SC-SM, SC   A-1-b, A-2,   0     Commy sand,   SC-SM, SC   A-1-b, A-2,   0     Commy sand,   SC-SM, SC   A-1-b, A-2,   0     Commy sand,   SC-SM, SC   SM   A-2-4     Commy sand,   SC-SM, SC	_		sandy loam,		A-2-4	_		_	_	
Sand, cobbly   SP-SM, SM,   A-2, A-1-b   0   0-25     Loamy fine   SC-SM, SM,   A-2, A-1-b   0   0-25     Cobbly loamy   SC-SM, SC			gravelly loamy			_		_	_	
Loamy fine   SP-SM, SM,   A-2, A-1-b   0   0-25			sand, cobbly			_		_	_	
Sand   SP-SM, SM,   A-2, A-1-b   0   0-25	_					_		_	_	
Loamy sand,   SP-SM, SW,   A-2, A-1-b   0   0-25     cobbly loamy   SC-SM, SC	_		sand	_		_		_	_	
fine sand,  gravelly loamy  sand, sand  Loamy sand,  fine sand,  SC-SM, SC, A-2-4  gravelly loamy  fine sand,  cobbly  SC-SM, SC, A-2, A-2-4  gravelly loamy  fine sand,  loamy sand,  SC-SM, SC, SM A-1-b, A-2,  GC-SM, SC, SM A-1-b, A-2,  A-2-4  Gravelly loamy  Inoamy sand,  sandy loam  Loamy sand,  SC-SM, SC, SM A-1-b, A-2,  GC-SM, SC, SM A-1-b		16-20	Loamy sand,	SP-SM, SM,	A-2, A-1-b	0	0-25	85-100	65-100	45-7
fine sand,  sand, sand  Loamy sand,  Loamy sand,  SP-SM, SM, A-1-b, A-2, 0 0-25  cobbly sand,  fine sand  Sand, cobbly  SC-SM, SC	_		cobbly loamy	SC-SM, SC		_		_	_	
Sand, sand   SP-SM, SM,   A-1-b, A-2,   0   0-25	_		fine sand,			_		_	_	
Sand, sand   SP-SM, SM,   A-1-b, A-2,   0   0-25     cobbly sand,   SC-SM, SC   A-2-4     fine sand   SC-SM, SC   A-2-4     gravelly loamy   SC-SM, SC   A-2, A-2-4     gravelly loamy   SC-SM, SC   A-2, A-2-4     fine sand,   SC-SM, SC, SM   A-1-b, A-2,   0   0-25     sandy loam   SC-SM, SC, SM   A-1-b, A-2,   0   0-25     coamy sand,   SC-SM, SC, SM   A-1-b, A-2,   0   0-25     coamy sand,   SC-SM, SC,   A-1-b, A-2,   0   0-25     coamy sand,   SC-SM, SC,   A-1-b, A-2,   0   0-25     coamy sand,   SC-SM, SC,   A-1-b, A-2,   0   0-25     sand, cobbly   SM, SP-SM   A-2-4        SM, SP-SM   A-2-4     cobbly   SM, SP-SM   SM, SP-SM   A-2-4     cobbly   SM, SP-SM   SM, SP-SM   SM, SP-SM   SM, SP-SM   SM, SP-SM   SM, SP-SM   SM, SP-SM   SM, SP-SM   SM, SP-SM   SM, SP-SM   SM, SP-SM   SM, SP-SM   SM, SP-SM   SM, S			gravelly loamy			_		_	_	
Loamy sand,   SP-SM, SW,   A-1-b, A-2,   0   0-25     cobbly sand,   SC-SM, SC   A-2-4     fine sand   SP-SM, SM,   A-3, A-1-b,   0   0-25     loamy sand,   SC-SM, SC   A-2, A-2-4     fine sand,   SC-SM, SC, SM   A-1-b, A-2,   0   0-25     sandy loam   SC-SM, SC, SM   A-1-b, A-2,   0   0-25     fine sandy loam   SC-SM, SC, SM   A-1-b, A-2,   0   0-25     coamy fine sandy   SC-SM, SC,   A-1-b, A-2,   0   0-25     coamy fine sandy   SC-SM, SC,   A-1-b, A-2,   0   0-25     coamy fine sandy   SC-SM, SC,   A-1-b, A-2,   0   0-25     coamy fine sand   SC-SM, SC,   A-1-b, A-2,   0   0-25     coamy fine sand,   SC-SM, SC,   A-1-b, A-2,   0   0-25     camy sand,   SC-SM, SC,   A-1-b, A-2,   0   0-25     camd, cobbly   SM, SP-SM   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     sand, cobbly   SM, SP-SM   A-2-4     capacity			sand, sand			_		_	_	
cobbly sand,   SC-SM, SC   A-2-4	_	20-27	Loamy sand,	SP-SM, SM,	A-1-b, A-2,	0	0-25	85-100	65-100	45-7
Gravelly loamy   Fine sand   SP-SM, SM, A-3, A-1-b, O 0-25     Ioamy sand, SC-SM, SC A-2, A-2-4     fine sand, SC-SM, SC, SM A-1-b, A-2, O 0-25     sandy loam, Ioamy fine sandy   SC-SM, SC, SM A-1-b, A-2, O 0-25     Ioamy fine sandy   SC-SM, SC, SM A-1-b, A-2, O 0-25     Ioamy fine sandy   SC-SM, SC, A-1-b, A-2, O 0-25     Ioamy fine sand   SC-SM, SC, A-1-b, A-2, O 0-25     Ioamy fine sand   SC-SM, SC, A-1-b, A-2, O 0-25     Ioamy fine sand   SC-SM, SC, A-1-b, A-2, O 0-25     Ioamy fine sand   SC-SM, SC, B-1-b, B-2, O 0-25     Ioamy fine sand   SC-SM, SC, B-1-b, B-2, O 0 0-25     Ioamy sand   SM, SP-SM   B-2-4     Ioamy sand   SM, SP-SM	_		cobbly sand,	SC-SM, SC	A-2-4	_		_	_	
fine sand   Sand, SM, SM, A-3, A-1-b, 0 0-25     loamy sand, SC-SM, SC A-2, A-2-4       gravelly loamy   SC-SM, SC, SM A-1-b, A-2,     sandy loam   SC-SM, SC, SM A-1-b, A-2,     fine sandy   SC-SM, SC, SM A-1-b, A-2,     loam, gravelly	_		gravelly loamy		_	_		_		
Sand, cobbly   SP-SM, SM,   A-3, A-1-b,   0   0-25     Loamy sand,   SC-SM, SC   A-2, A-2-4     Gravelly loamy	_		fine sand		_	_		_	_	
loamy sand,   SC-SM, SC   A-2, A-2-4	_	27-43		SP-SM, SM,	A-3, A-1-b,	0	0-25	85-100	65-100	40-8
gravelly loamy	_		loamy sand,	SC-SM, SC	A-2, A-2-4	_		_	_	
fine sand,	_		gravelly loamy			_		_	_	
Sandy loam   SC-SM, SC, SM A-1-b, A-2, 0 0-25     Sandy loam, fine sandy   A-2-4     Loamy fine   SC-SM, SC, A-1-b, A-2, 0 0-25     Loamy fine   SC-SM, SC, A-1-b, A-2, 0 0-25     gravelly loamy SM, SP-SM A-2-4     sand cobbly   SC-SM, SC, A-1-b, A-2,	_		fine sand,	_		_		_	_	
Loamy sand,   SC-SM, SC, SM   A-1-b, A-2,   0   0-25     sandy loam,   A-2-4         loam, gravelly           sand                   sand, cobbly               sand                   sand                       sand                         sand                             sand                                 sand                                   sand                                     sand			sandy loam			_		_	_	
sandy loam,   A-2-4	_	43-75				0	0-25	85-100	65-100	45-8
fine sandy	_		sandy loam,		A-2-4	_		_		
loam, gravelly    loamy fine			fine sandy		_	_		_		
loamy fine			loam, gravelly							
sand					_	_		_		
Loamy sand,   SC-SM, SC,   A-1-b, A-2,   0   0-25     gravelly loamy   SM, SP-SM   A-2-4     sand, cobbly	_		sand		_	_		_		
slly loamy SM, SP-SM cobbly	_	75-80	Loamy sand,	SC-SM, SC,	A-1-b, A-2,	0	0-25	85-100	65-100	45-7
	_		gravelly loamy	SM, SP-SM	A-2-4	_		_	_	
sand	_					_		_		
	_		sand			_		_		

Table 23. -- Engineering Index Properties -- Continued

Lodenson	5 5 4 4	4 & CO.	Classif	Classification	Fragments	nents	Per	Percentage pass	pass
and	Toda o				>10	3-10	a 	0 0 0 1	T TOOM
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	п				Pct	Pct			
970E:									
Pence	0-3	Sandy loam			0	0-15	80-100 75-100	75-100	
	3-8	Sandy loam,	SM, SC-SM	A-2-4, A-4	0	0-15	80-100 75-100	75-100	45-95
	8-15	Gravelly sandy	SM, SC-SM	A-1-b, A-2-4,	0	0-15	55-100 50-100	50-100	30-95
		loam, sandy			_				
		loam, loam,		_			_		
		fine sandy			_		_	_	
		loam			_		_	_	
	15-21	86	GM, GP-GM,	A-1-b, A-3	0	0-15	45-100	40-95	20-70
			SP-SM, SM		_		_	_	
							_	_	
		loamy fine					_	_	
	21-60	Stratified sand	SP-SM,	A-1, A-2, A-3	0	0-15	45-100	40-95	15-65
		to very	GP-GM, GP						
		gravelly							
		coarse sand							
Greenwood	9-0	Peat	PT	A-8	0	0	:	-	-
	09-9	Mucky peat	PT	A-8	0	0	-	-	
Tremstadt	0 - 5	Sandy loam	SM. SG.	A - 2	0 - %	0-15	75-100 70-95	70-95	40-60
	5-33	Loamy sand,		A-2, A-1-b	0-3	0-15	75-100 70-95	70-95	30-75
		sand							
	33-37	Sandy loam,	SC, SC-SM, SN	SM A-1-b, A-2	0-3	0-15	70-100 65-95	65-95	30-60
		loamy sand,					_		
		gravelly loamy							
		sand							
	37-45		SC, SC-SM, SN	SM A-1-b, A-2	0-3	0-15	70-100	65-95	30-60
		sandy loam,					_	_	
		gravelly loamy							
	45-70	Loamy sand,	SM, SC-SM	A-1-b, A-2	0-3	0-15	70-100	65-95	30-50
		gravelly loamy							
	70-80	Loamy sand,	SC-SM, SM	A-1-b, A-2	0-3	0-15	70-100 65-95	65-95	30-50
		gravelly loamy					_	_	
		sand							
					_			_	

Table 23. -- Engineering Index Properties -- Continued

Sandy loam, SC, SM A-2-4, A-fine sandy loam, SC, SM A-2-4, A-loam sandy, gravelly sand, very gravelly loamy sand sandy loam, SP-SM, SM A-3 sand gravelly loamy Sand SP-SM, SM A-1, A-2, to very gravelly loamy Sand SP-SM, SC-SM A-1, A-2, to very gravelly loamy Sand SP-SM, SC-SM A-1-b, A-loamy sand, SC-SM, SC-SM A-1-b, A-sand sandy loam, SC-SM, SC, SM A-1-b, A-sand loamy sand, SC-SM, SM A-1-b, A-sand loamy sand, SC-SM, SM A-1-b, A-sand loamy sand, SC-SM, SM A-1-b, A-sand loamy sand, SC-SM, SM A-1-b, A-sand loamy sand, SC-SM, SM A-1-b, A-sand loamy sand, SC-SM, SM A-1-b, A-sand loamy sand, SC-SM, SM A-1-b, A-sand loamy sand, SC-SM, SM A-1-b, A-sand loamy sand, SC-SM, SM A-1-b, A-sand loamy sand, SC-SM, SM A-1-b, A-sand loamy sand, SC-SM, SM A-1-b, A-sand loamy sand, SC-SM, SM A-1-b, A-sand gravelly loamy sand, SC-SM, SM A-1-b, A-sand gravelly loamy sand, SC-SM, SM A-1-b, A-sand gravelly loamy sand, SC-SM, SM A-1-b, A-sand gravelly loamy sand, SC-SM, SM A-1-b, A-sand gravelly loamy sand, SC-SM, SM A-1-b, A-sand sand		TISDA textime	Classif	Classification	Fragments	ents	Per	Percentage pass	pass
1 name   In		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			>10	3-10	a 	0	
In	-		Unified	AASHTO	inches inches	inches	4	10	40
15-31   Sandy loam   SC, SM   A-2-4, A-2-4, A-3-4     15-31   Loamy sand,   SP-SM, SM   A-3     ,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A-1-b, A-1,     15-31   Sandy loam,   SC-SM, SM   A-1-b, A	u I				Pct	Pct			
15-31   Sandy loam,   SC, SM   A-2-4, A-1     15-31   Loamy sand,   SP-SM, SM   A-3     15-31   Loamy sand,   SP-SM, SM   A-3     15-32   Coarse sand,   SP-SM, SM   A-3     15-34   Coarse sand,   SP-SM, SM   A-3     15-35   Gravelly loamy   SP-SM, SM   A-3     15-36   Stratified sand   SP, GP,   A-1, A-2,     15-37   Sand, very   GP-GM, SP-SM   A-1, A-2,     15-38   Loamy sand,   SM, SC-SM   A-1, A-2,     15-39   Loamy sand,   SM, SC-SM   A-1, A-2,     15-30   Sandy loam,   SC-SM, SM   A-1, A-1, A-2,     15-31   Loamy sand,   SC, SC-SM, SM   A-1, A-1, A-2,     15-32   Loamy sand,   SC-SM, SM   A-1, A-1, A-2,     15-34   Loamy sand,   SC-SM, SM   A-1, A-2,     15-35   Loamy sand,   SC-SM, SM   A-1, A-1, A-2,     15-36   Stratelly loamy   SC-SM, SM   A-1, A-2,     15-37   Loamy sand,   SC-SM, SM   A-1, A-2,     15-38   Sandy loam,   SC-SM, SM   A-1, A-2,     15-38   Sandy loam,   SC-SM, SM   A-1, A-2,     15-36   Stravelly loamy   SC-SM, SM   A-1, A-2,     15-37   Sandy loam,   SC-SM, SM   A-1, A-2,     15-38   Sandy loam,   SC-SM, SM   A-1, A-2,     15-38   Sandy loam,   SC-SM, SM   A-1, A-2,     15-39   Sandy loam,   SC-SM, SM   A-1, A-2,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-2,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-2,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-2,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-2,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-2,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-2,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-2,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-1, A-1,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-1,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-1,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-1,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-1,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-1,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-1,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-1,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-1,     15-30   Stravelly loamy   SC-SM, SM   A-1, A-1									
3-15   Sandy loam,   SC, SM   A-2-4, A-1	_	Sandy loam			0	0-5	85-100	80-100	55-80
15-31   Loamy sand,   SP-SM, SM   A-3	_	Sandy loam,			0	0-5	85-100 80-100	80-100	55-80
15-31   Loamy sand,   SP-SM, SM   A-3	_				_		_	_	
15-31   Loamy sand,   SP-SM, SM   A-3	_	loam			_		_		
coarse sand,	_	Loamy sand,		A-3	0	0-5	55-100 50-95	20-95	20-75
gravelly sand,	_	coarse sand,			_		_		
very gravelly	_	gravelly sand,			_		_	_	
10amy sand   31-36   Gravelly loamy   SP-SM, SM   A-3     sand, coarse   sand, very   sand yeavelly loamy   SP-SM, SP   A-1, A-2, to very   gravelly loamy   GP-GM, SP-SM   A-1, A-2, to very   GP-GM, SP-SM   A-2, A-1-    sand   sand   SM, SC-SM   A-2, A-1-    sand   sand   SC-SM, SC, SM   A-1-b, A-1     sand   sand   SC-SM, SM   A-1-b, A-1     sand   SC-SM, SM   A-1-b, A-1-    SC-SM, SM   SC-S	_	very gravelly			_		_		
31-36   Gravelly loamy   SP-SM, SM   A-3     sand, coarse   sand, very     sand, very   Gravelly     sand   sand   SP-SM, SP-SM     sand   SP-SM   A-1, A-2, to very   GP-GM, SP-SM     coarse sand   SP, GP, GP, A-1, A-2, and sand   SM, SC-SM   A-2, A-1-    sand   sand   SC-SM, SC, SM   A-1-b, A-1     sand   sand   SC-SM, SM   A-1-b, A-1     sand   sand   SC-SM, SM   A-1-b, A-1     sand   SP-TO   Loamy sand,   SC-SM, SM   A-1-b, A-1     sand   SP-TO   Loamy sand,   SC-SM, SM   A-1-b, A-1     sand   SP-TO   Loamy sand,   SC-SM, SM   A-1-b, A-1     sand   SP-TO   Loamy sand,   SC-SM, SM   A-1-b, A-1     sand   SP-TO   Loamy sand,   SC-SM, SM   A-1-b, A-1     sand   SP-TO   Loamy sand,   SC-SM, SM   A-1-b, A-1     sand   SP-TO   SP-SM   SP-SM   SP-SM   SP-SM     sand   SP-TO   SP-SM   SP-SM   SP-SM   SP-SM   SP-SM     sand   SP-TO   SP-SM   SP-S	_	loamy sand					_		
sand, coarse   sand, coarse   sand, orary   sand, very   gravelly loamy   sand   SP, GP,   A-1, A-2, to very   GP-GM, SP-SM   A-1, A-2,   coarse sand   SM, SC-SM   A-2, A-1-  sand   sand   SM, SC-SM, SM   A-1-b, A-1  sand   sand   ST-45   Loamy sand,   SC-SM, SM   A-1-b, A-1  sand   sand   ST-70   Loamy sand,   SC-SM, SM   A-1-b, A-1  sand   sand   ST-70   Loamy sand,   SC-SM, SM   A-1-b, A-1  sand   sand   ST-80   ST-90   S	_	Gravelly loamy		A-3	0	0-5	55-100 50-100 20-75	50-100	20-75
sand, very   sand, very   sand, very   sand, very   sand   sand   Stratified sand   SP, GP, GP, A-1, A-2, to very   GP-GM, SP-SM     coarse sand   GP-GM, SP-SM     sand   SM, SC-SM   A-2, A-1-  sand   sand   SM, SC-SM, SM   A-1-b, A-1   sand   sand   sand   SC-SM, SM   A-1-b, A-1   sand   sand   SA-2, SC-SM, SM   SA-1-b, A-1   sand	_				_		_		
sand, very   sand   s	_				_		_	_	
gravelly loamy     sand									
Send   Stratified sand   SP, GP, GP, A-1, A-2, to very   GP-GM, SP-SM   Gravelly   Goarse sand   SM, SC-SM   A-2, A-1-		gravelly loamy			_		_		
36-60   Stratified sand   SP, GP,   A-1, A-2, to very   GP-GM, SP-SM   Gravelly   Coarse sand   SM, SC-SM   A-2, A-1-  S-33   Loamy sand,   SM, SC-SM   A-2, A-1-  S-34   Sandy loam,   SC-SM, SC, SM   A-1-b, A-1  Sand   ST-45   Loamy sand,   SC, SC-SM, SM   A-1-b, A-1  Sand   Sandy loam,   SC-SM, SM   A-1-b, A-1  Sand   Sand	_	sand					_		
to very   GP-GM, SP-SM     gravelly   Garse sand     coarse sand   SM, SC-SM   A-2, A     sand   Sandy loam,   SM, SC-SM   A-1-b,     sand   Gravelly loamy     33-37   Sandy loam,   SC-SM, SC, SM   A-1-b,     sand   ST-45   Loamy sand,   SC, SC-SM, SM   A-1-b,     sand   ST-45   Loamy sand,   SC-SM, SM   A-1-b,     sand   ST-45   Loamy sand,   SC-SM, SM   A-1-b,     sand   ST-45   Loamy sand,   SC-SM, SM   A-1-b,     sand   Gravelly loamy   ST-50   ST-50   ST-50     sand   ST-50   Loamy sand,   SC-SM, SM   A-1-b,     sand   ST-50   ST				A-1, A-2, A-3	0	0-5	30-100	25-95	15-65
tadt 0-5 Sandy loam SM, SC-SM A-2, A sand loamy sand,   SC-SM, SC-SM A-2, A sand   Sandy loam,   SC-SM, SC, SM A-1-b,   loamy sand,   SC-SM, SC, SM A-1-b,   sand   37-45 Loamy sand,   SC-SM, SM A-1-b,   gravelly loamy   SC-SM, SM A-1-b,   sand   45-70 Loamy sand,   SC-SM, SM A-1-b,   sand   Sand   SC-SM, SM A-1-b,   sand   Sand   SC-SM, SM A-1-b,   sand   sand   SC-SM, SM SA-1-b,   sand   san	_	to very							
tadt 0-5 Sandy loam SM, SC-SM A-2, A sand loamy sand, SM, SC-SM A-2, A sand loamy sand, SC-SM, SC, SM A-1-b, Sand gravelly loamy sand, SC, SC-SM, SM A-1-b, Sand loamy sand, SC-SM, SM A-1-b, Sand loamy sand, SC-SM, SM A-1-b, Sand loamy sand, SC-SM, SM A-1-b, Sand loamy sand, SC-SM, SM A-1-b, Sand loamy sand, SC-SM, SM A-1-b, Sand loamy sand, SC-SM, SM A-1-b, Sand loamy sand, SC-SM, SM A-1-b, Sand loamy sand, SC-SM, SM A-1-b, Sand loamy sand, SC-SM, SM A-1-b, Sand loamy sand, SC-SM, SM A-1-b, Sand loamy sand, SC-SM, SM A-1-b, Sand sand	_	gravelly					_		
tadt 0-5 Sandy loam SM, SC-SM A-2, A sand Sand SM, SC-SM A-2, A sand Sand Sand, SC-SM, SC, SM A-1-b, I loamy sand, Sand Sand Sand Sand Sand Sand Sand Sand	_	coarse sand			_		_	_	
5-33   Loamy sand,   SM, SC-SM   A-2, A     5-33   Loamy sand,   SM, SC-SM   A-2, A     33-37   Sandy loam,   SC-SM, SC, SM   A-1-b,     10amy sand,   SC, SC-SM, SM   A-1-b,     27avelly loamy   SC, SC-SM, SM   A-1-b,     37-45   Loamy sand,   SC, SC-SM, SM   A-1-b,     45-70   Loamy sand,   SC-SM, SM   A-1-b,     3and   45-70   Loamy sand,   SC-SM, SM   A-1-b,     5and   5and   SC-SM, SM   A-1-b,     5and   5and   SC-SM, SM   A-1-b,     5and   SC-SM									
Loamy sand,   SM, SC-SM   A-2, A   sand   Sandy loam,   SC-SM, SC, SM   A-1-b,   loamy sand,   SC, SC-SM, SM   A-1-b,   sand   Sandy loam,   SC, SC-SM, SM   A-1-b,   sand   Sc-SM, SM   Sc-	0-5	Sandy loam	SC-SM	A-2	0-3	0-15	75-100 70-95	70-95	40-60
Sandy loam,   SC-SM, SC, SM A-1-b, loamy sand,   SC, SC-SM, SM A-1-b, sand   Loamy sand,   SC, SC-SM, SM A-1-b, sand   Loamy sand,   SC-SM, SM   A-1-b, gravelly loamy   SC-SM, SM   A-1-b, gravelly loamy   SC-SM, SM   A-1-b, gravelly loamy   SC-SM, SM   A-1-b, sand   Sc-SM, SM   Sc-SM, SM   A-1-b, sand   Sc-SM, SM   A-1-b, sand   Sc-SM, SM   Sc-SM, SM   A-1-b, sand   Sc-SM, SM   A-1-b, sand   Sc-SM, SM   Sc-SM, SM   A-1-b, sand		Loamy sand,	SC-SM		0-3	0-15	75-100	70-95	30-75
Sandy loam,   SC-SM, SC, SM A-1-b, loamy sand,   SC, SC-SM, SM A-1-b, sand   Loamy sand,   SC, SC-SM, SM A-1-b, sand   Loamy sand,   SC-SM, SM   A-1-b, gravelly loamy   SC-	_	sand			_		_		
loamy sand,   sand   loamy sand,   SC, SC-SM, SM A-1-b, sand   loamy   sand   loamy   sand   loamy sand   SC-SM, SM   A-1-b, gravelly loamy     A-1-b, sand   SC-SM, SM   A-1-b, san	_	Sandy loam,	SC,	A-1-b, A-2	0-3	0-15	70-100	65-95	30-60
gravelly loamy sand Loamy sand, gravelly loamy gravelly loamy gravelly loamy sand Loamy sand, Loamy sand, SC-SM, SM A-1-b, gravelly loamy gravelly loamy sand Loamy sand, sc-SM, SM A-1-b, gravelly loamy	_	loamy sand,			_		_	_	
sand Loamy sand, SC, SC-SM, SM A-1-b, gravelly loamy Loamy sand, SC-SM, SM A-1-b, gravelly loamy Sand Loamy sand, SC-SM, SM A-1-b, gravelly loamy sand Loamy sand, SC-SM, SM A-1-b,		gravelly loamy							
Loamy sand, SC, SC-SM, SM A-1-b, sandy loam, gravelly loamy sand   SC-SM, SM A-1-b, gravelly loamy   SC-SM, SM A-1-b, gravelly loamy   SC-SM, SM A-1-b, gravelly loamy sand, SC-SM, SM A-1-b, gravelly loamy sand	_	sand	;			,			,
sandy loamy gravelly loamy loamy sand, SC-SM, SM A-1-b, sand Loamy sand, SC-SM, SM A-1-b, gravelly loamy gravelly loamy		Loamy sand,	SC-SM,	A-1-D, A-2	ε - O	0-T2	00T-0/	06-09 06-09	30-60
gravelly loamy sand Loamy sand, sand Loamy sand, SC-SM, SM A-1-b, gravelly loamy gravelly loamy		sandy loam,							
sand  Loamy sand,  gravelly loamy  Loamy sand,  sand  Loamy sand,  sand  A-1-b,  A-1-b,  A-1-b,		gravelly loamy							
Loamy sand,   SC-SM, SM   A-1-b,     gravelly loamy           Loamy sand                   gravelly loamy                 sand	_	sand			_				
gravelly loamy   sand   SC-SM, SM   gravelly loamy   SC-SM, SM   sand   sand   sand   SC-SM, SM   SC-S	_	Loamy sand,			0-3	0-15	70-100	65-95	30-50
sand     Loamy sand,   SC-SM, SM   gravelly loamy   sand	_	gravelly loamy			_		_	_	
Loamy sand,   SC-SM, SM   gravelly loamy   sand	_	sand			_		_		
gravelly loamy   sand	_	Loamy sand,		A-1-b, A-2	0-3	0-15	70-100 65-95	65-95	30-50
sand	_	gravelly loamy			_		_	_	
The same of the sa	_	sand			_		_	_	
	_				_		_	_	

Table 23. -- Engineering Index Properties -- Continued

soil name   In   In   In   In   In   In   In   I			)								ajewe number-	Thorn
1 name			_					>10	3-10			
				Uni	Unified	AASHTO	нто	inches	inches inches	4	10	40
<del>-</del>	= -							Pct	Pct			
3 15 15	0-3	Sandy loam		SC, SM	_	A-2-4,	A-4	0	0-5	85-100	80-100	55-80
15	3-15	Sandy loam,	_	SC, SM	_	A-2-4,	A-4	0	0-5	85-100	80-100	55-80
15		fine sandy	dy			_		_	_	_		
15		loam						_				
	15-31	Loamy sand,		SM, SP	SP-SM	A-3		0	0-5	55-100  50-95	50-95	20-75
		coarse s	sand,									
		gravelly sand,	sand,									
		very gravelly	velly									
_		loamy sand	nd									
31	31-36	Gravelly loamy		SM, SP	SP-SM	A-3		0	0-5	55-100	50-100 20-75	20-75
_		sand, cos										
_			gravelly									
			7									
		salla, ve	, r									
		gravelly loamy	Toamy									
		sand				_						
98	36-60	Stratified		sand SP-SM,	GP,	A-1, A-	A-2, A-3	0	0-2	30-100 25-95	25-95	15-65
_		to very		GP-GM,	I, SP			_		_		
_		gravelly				_						
_		coarses	sand									
		7				· · · · · · · · · · · · · · · · · · ·	•			- C		L L
	ה ה ה ה	Sandy 10a		מי מי		SC A-2, A-4	, 1	> 0	0 1	007-00	0 0	00-10
<b>n</b> 	2-TZ	Gravelly sandy			SC-SM, SM	A-I-D,	A-2,	>	0-T2	66-06 00T-09	26-0c	35-75
			amy			A - 4						
		sand, gra	gravelly									
1		loamy sand										
12	12-16	Gravelly loamy	_	SP-SM,		A-1-b,	A-2	0	0-15	001-09	20-92	35-75
		sand, los	loamy	SC-SM,	ı, sc			_	_			
_	_	sand, sa	sandy					_		_		
_		loam										
16	16-34	Loamy sand,	ď,	SC-SM,		SP-SM, A-1-b,	A-2	0	0-15	60-100	50-95	35-75
		sand, gr	gravelly	SM		_						
		loamy sand	nd			_						
34	34-46			SP-SM,	SM,	A-1-b,	A-2	0	0-15	60-100	50-95	35-75
_			elly	SC-SM								
_			sand									
46	46-80			SC-SM,		SP-SM, A-1-b,	A-2	0	0-15	60-100 50-95	50-95	35-75
_		sand, los	loamy	SM								
_		sand, sand	nd									

Table 23. -- Engineering Index Properties -- Continued

Total   Sandy loam   SN, SC, SC-SN A-2, A-4   0-2   0-15   S5-10   S0-95	Men	5 5 7		Classification	cation	Fragn	Fragments	Per	Percentage pass	Pass
1 mane	and	4				>10	3-10		0	TIME OF THE OWNER
## Per Per Per Per Per Per Per Per Per Per	soil name			Unified	AASHTO	inches	inches	4	10	40
12-16   Gravelly sandy   SN, SC. SG-SM, A-2, A-4   0-2   0-15   69-100   80-55     10-10   10-20   10-20   10-20   10-20   10-20   10-20   10-20     12-16   Gravelly loamy   SP-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95     10-20   10-20   10-20   10-20   10-20   10-20   10-20     10-20   10-20   10-20   10-20   10-20   10-20   10-20   10-20     10-20   10-20   10-20   10-20   10-20   10-20   10-20   10-20     10-20		ų.				Pct	Pct			
12-16   Gravelly sandy   SM, SC-SM, A-2, A-4   0-2   0-15   60-100   50-95     12-16   Gravelly sandy   SM, SC-SM, SC, A-1-b, A-2,   0   0-15   60-100   50-95     12-16   Gravelly loamy   SC-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95     16-34   Loamy sand,   SP-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95     16-34   Loamy sand,   SP-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95     16-34   Loamy sand,   SP-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95     16-34   Loamy sand,   SP-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95     16-34   Sand, gravelly   SP-SM, SC-SM,   A-1-b, A-2   0   0-15   60-100   50-95     16-35   Sand, gravelly   SP-SM, SC-SM,   A-1-b, A-2   0   0-15   60-100   50-95     16-36   Sand, gravelly   SP-SM, SM,   A-2-4, A-4   0   0-5   85-100   80-100     16-37   Loamy sand,   SM, SP-SM,   A-2-4, A-4   0   0-5   85-100   50-95     16-38   Sandy loam,   SC, SM   A-2-4, A-4   0   0-5   85-100   50-95     16-39   Gravelly loam,   SC, SM   A-3   0   0-5   55-100   50-95     16-31   Loamy sand,   SM, SP-SM,   A-3   0   0-5   55-100   50-95     16-31   Loamy sand,   SM, SP-SM,   A-3   0   0-5   55-100   50-95     16-31   Loamy sand,   SM, SP-SM,   A-3   0   0-5   55-100   50-95     16-30   Gravelly loamy   SP-SM,   A-1, A-2, A-3   0   0-5   55-100   50-95     16-30   Gravelly loamy   SP-SM,   A-1, A-2, A-3   0   0-5   55-100   50-95     16-30   Gravelly loamy   GP, SP-SM   A-1, A-2, A-3   0   0-5   55-100   50-95     16-30   Gravelly loamy   GP, SP-SM   A-1, A-2, A-3   0   0-5   55-100   50-95     16-30   Gravelly loamy   GP, SP-SM   A-1, A-2, A-3   0   0-5   55-100   50-95     16-30   Gravelly loamy   GP, SP-SM   A-1, A-2, A-3   0   0-5   55-100   50-95     16-30   Gravelly loamy   GP, SP-SM   A-1, A-2, A-3   0   0-5   55-100   50-95     17-30   Gravelly loamy   GP, SP-SM   GP, GM,   GP, G	1080B:									
3-12   Gravally sandy   SM, SC-SM, SC A-1b, A-2,   0   0-15   60-100   50-95     10-am, Joamy sand     A-1-b, A-2   0   0-15   50-100   50-95     16-31   Loamy sand   SC, SC-SM,   A-1-b, A-2   0   0-5   55-100   50-95     16-31   Loamy sand   SC, SC-SM,   A-3   0   0-5   55-100   50-95     16-31   Loamy sand   SC, SC-SM,   A-3   C   C   SC-SM,   SC-SM,   A-3   C   C   SC-SM,   SC-SM,   A-3   C   C   SC-SM,   SC-SM,   SC-SM,   A-3   C   C   SC-SM,	Spoonerhill,	0-3	Sandv loam		A-2. A-4	0-2	0-15	85-100	80 - 95	55-75
12-16   Gravelly loamy   SP-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95		3-12	Gravelly sandy		A-1-b. A-2.	, -	0-15	60-100	50-95	35-75
12-16   Gravelly loamy   SP-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95		  -  -	loam, loamy		A-4	,				
12-16   Gravelly loamy   SP-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95										
12-16   Gravelly loamy   SP-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95										
sand, loamy   SC-SM, SC   Sand, loamy   SC-SM, SC   I-oam   Sand, sandy   I-oam   Sand, sandy   I-oam   Sand, gravelly   SC-SM, SC		12-16	Gravelly loamy	SP-SM, SM,		0	0-15	60-100	50-95	35-75
16-34   Loamy sand,   SP-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95     16-34   Loamy sand,   SP-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95     sand, gravelly   SC-SM, SC,   A-1-b, A-2   0   0-15   60-100   50-95     sand, loamy sand   SP-SM, SC-SM,   A-1-b, A-2   0   0-15   60-100   50-95     sand, loamy sand   SC, SC-SM,   A-1-b, A-2   0   0-15   60-100   50-95     sand, loamy sand,   SC, SM   A-2-4, A-4   0   0-5   85-100   80-100     15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5   55-100   50-95     sand, coarse sand,   SP-SM, SM   A-3   0   0-5   SS-100   50-100     sand, coarse sand,   SP-SM, SM   A-1, A-2, A-3   0   0-5   SS-100   50-100     sand, coarse sand,   SP-SM,   SP-SM   A-1, A-2, A-3   0   0-5   SS-100   50-100     sand, coarse sand,   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-100     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-100     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,   A-1, A-2, A-3   0   0-5   SS-100   SS-95     sand, coarse sand   SP-SM,		;   	gand loamy	מלים אות ביו		,	: - 			
16-34   Loamy sand,   SP-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95     sand, gravelly   SC-SM, SC   A-1-b, A-2   0   0-15   60-100   50-95     sand, gravelly   SP-SM, SC-SM   A-1-b, A-2   0   0-15   60-100   50-95     sand, gravelly   SP-SM, SC-SM   A-1-b, A-2   0   0-15   60-100   50-95     sand, loamy sand   SC, SM   A-2-4, A-4   0   0-5   85-100   80-100     sand, loamy sand   SC, SM   A-2-4, A-4   0   0-5   85-100   80-100     sand, gravelly   SM, SP-SM   A-3   0   0-5   S5-100   50-95     sand, gravelly   SM, SP-SM   A-3   0   0-5   S5-100   50-100     sand, gravelly   SM, SP-SM   A-3   0   0-5   S5-100   50-100     sand, gravelly   SM, SP-SM   A-3   0   0-5   S5-100   50-100     sand, gravelly   SA, SP-SM   A-3   0   0-5   S5-100   50-100     sand, gravelly loamy   SP-SM, SM   A-1, A-2, A-3   0   0-5   S5-100   50-100     sand, coarse sand   SP-SM, SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-100     sand, coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-100     sand, coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     coarse sand   SP-SM   A-1, A-2, A-3   0   0-5   SP-SM   0-10   0-10   0-10     coarse sand   SP-SM				70						
16-34   Loamy sand,   SP-SM, SM,   A-1-b, A-2   0   0-15   60-100   50-95     10-amy sand   SP-SM, SC,   A-1-b, A-2   0   0-15   60-100   50-95     10-amy sand   SP-SM, SC,   A-1-b, A-2   0   0-15   60-100   50-95     10-amy sand   SM, SC,   A-1-b, A-2   0   0-15   60-100   50-95     10-amy sand   SM, SP-SM   A-1-b, A-2   0   0-15   60-100   50-95     10-amy sand   SC, SM   A-2-4, A-4   0   0-5   85-100   80-100     15-31   Loamy sand   SM, SP-SM   A-3   0   0-5   55-100   50-95     15-31   Loamy sand   SM, SP-SM   A-3   0   0-5   55-100   50-100     15-31   Loamy sand   SM, SP-SM   A-3   0   0-5   55-100   50-100     15-31   Loamy sand   SM, SP-SM   A-3   0   0-5   55-100   50-100     15-31   Loamy sand   SM, SP-SM   A-3   0   0-5   55-100   50-100     15-31   Loamy sand   SM, SP-SM   A-3   0   0-5   55-100   50-100     15-31   Loamy sand   SM, SP-SM   A-3   0   0-5   55-100   50-100     15-31   Loamy sand   Sm, SP-SM   A-3   0   0-5   55-100   50-100     15-31   Loamy sand   Sm, SP-SM   A-3   0   0-5   S5-100   50-100     15-31   Loamy sand   SP-SM, SM   A-3   0   0-5   S5-100   50-100     15-31   Loamy sand   SP-SM, SM   A-3   0   0-5   S5-100   50-100     15-31   Loamy sand   SP-SM, SM   A-3   0   0-5   S5-100   50-100     15-31   Loamy sand   SP-SM, SM   A-3   0   0-5   S5-100   50-100     15-31   Loamy sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-100     15-31   Loamy sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-100     15-31   Loamy sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     15-31   Loamy sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     15-31   Loamy sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     15-31   Loamy sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   50-95     15-31   Loamy sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   S0-95     15-31   Loamy sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   S0-95     15-31   Loamy sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   S0-95     15-31   Loamy sand   SP-SM   A-1, A-2, A-3   0   0-5   S5-10										
15-31   Loamy Sand, Gravelly   SC-SM, SC   A-1-b, A-2   0   0-15   60-100   50-95   Sand, gravelly   SC-SM, SC   A-1-b, A-2   0   0-15   60-100   50-95   Sand, gravelly loamy   SM, SC, SM   A-2-4, A-4   0   0-5   85-100   80-100   Sand, sand   Sandy loam, SC, SM   A-2-4, A-4   0   0-5   85-100   80-100   Sandy loam, SC, SM   A-2-4, A-4   0   0-5   85-100   80-100   Sandy loam, SC, SM   A-3   0   0-5   85-100   S0-95   Sandy loam, SC, SM   A-3   0   0-5   S5-100   S0-95   Sandy loam, SC, SM   A-3   0   0-5   S5-100   S0-95   Sandy loam, SC, SM   A-3   0   0-5   S5-100   S0-95   Sandy loam, SC, SM   A-3   0   0-5   S5-100   S0-95   Sandy loam, Sand, SP-SM, SM   A-3   0   0-5   S5-100   S0-100   So-95   Sandy loam, Sand, Gravelly loamy   SP-SM, SM   A-3   0   0-5   S5-100   S0-100   So-95   Sand, very   Sand, very   SP-SM   A-1, A-2, A-3   0   0-5   S5-100   S0-95   Sand, very   Sand, very   SP-SM   A-1, A-2, A-3   0   0-5   S0-100   S0-95   So-		16-34		מס-מא		·	С 1	001-09	0 0	35-75
34-46   Sand, loamy sand   SM, SC. SM   A-1-b, A-2   0   0-15   60-100   50-95     sand, gravelly   SP-SM, SC-SM   A-1-b, A-2   0   0-15   60-100   50-95     loamy sand   SC, SC-SM, A-1-b, A-2   0   0-15   60-100   50-95     sand, loamy   SM, SP-SM   A-2-4, A-4   0   0-5   85-100   80-100     3-15   Sandy loam   SC, SM   A-2-4, A-4   0   0-5   85-100   80-100     15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5   55-100   50-95     coarse sand,   SM, SP-SM   A-3   0   0-5   55-100   50-100     15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5   55-100   50-100     sand, coarse   Sand, gravelly loamy   SP-SM, SM   A-3   0   0-5   55-100   50-100     sand, coarse   Sand, gravelly loamy   Sand, gravelly   A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   SP, GP-SM, A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   SP, GP-SM, A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   Gravelly   GP, SP-SM   A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   Gravelly   GP, SP-SM   A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   Gravelly   GP, SP-SM   A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   Gravelly   GP, SP-SM   A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   Gravelly   GP, SP-SM   A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   Gravelly   GP, SP-SM   A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   Gravelly   GP, SP-SM   A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   Gravelly   GP, SP-SM   A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   Gravelly   GP, GP, GM, A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   GP, GP, GM, A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   GP, GP, GM, A-1, A-2, A-3   0   0-5   30-100   25-95     coarse sand   GP, GP, GP, GP, GP, GP, GP, GP, GP, GP,		1 0	2			• •	9	) 		
34-46   Sand, loamy   SM, SC, SC, M   A-1-b, A-2   0   0-15   60-100   50-95     loamy sand   loamy sand   sand, loamy   SC, SC-SM,   A-1-b, A-2   0   0-15   60-100   50-95     sand, loamy   SC, SC-SM,   A-1-b, A-4   0   0-15   60-100   50-95     sand, loamy   SC, SM   A-2-4, A-4   0   0-5   85-100   80-100     15-31   Sandy loam   SC, SM   A-2+4, A-4   0   0-5   85-100   80-100     15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5   55-100   50-95     very gravelly loamy   SP-SM, SM   A-3   0   0-5   55-100   50-100     sand, coarse   sand, gravelly   Sand, very   Sand,										
Sandy gravelly   SP-SM, SC-SM   A-1-b, A-2   0   0-15   60-100   50-95		34-46		מאַ		c	С 1	60-100	20.07	25.75
15-80   Gravelly loamy   SC, SC-SM,   A-1-b, A-2   0   0-15   60-100   50-95     sand, loamy sand   SM, SP-SM   A-2-4, A-4   0   0-5   85-100   80-100     3-15   Sandy loam   SC, SM   A-2-4, A-4   0   0-5   85-100   80-100     15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5   55-100   80-100     15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5   55-100   50-95     15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5   55-100   50-95     15-31   Loamy sand,   SP-SM, SM   A-3   0   0-5   55-100   50-95     15-31   Loamy sand   SP-SM, SM   A-3   0   0-5   55-100   50-100     15-31   Sand, coarse   Sand, coarse   Sand, gravelly   SP-SM, SM   A-1, A-2, A-3   0   0-5   55-100   50-100     15-31   Sand, coarse sand   SP, GP-GM,   A-1, A-2, A-3   0   0-5   30-100   55-95     15-31   Carselly   Carse sand   SP, SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy sand   SP, SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy sand   SP, SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-100   SP-95     15-31   Loamy   SP-SM   A-1, A-2, A-3   0   0-5   SP-		1	1 .			• •	9	) H		
46-80   Gravelly loamy   SC, SC-SM,   A-1-b, A-2   0   0-15   60-100   50-95			loamy sand							
Sand, loamy   SM, SP-SM   Sand, loamy   SM, SP-SM   Sand, loam   SC, SM   A-2-4, A-4   0   0-5   85-100   80-100     15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5   85-100   80-100     15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5   55-100   50-95     15-31   Loamy sand,   SM, SP-SM   A-3   0   0-5   55-100   50-100     15-31   Loamy sand,   SP-SM, SM   A-3   0   0-5   55-100   50-100     15-31   Sand, coarse   Sand,		46-80	Gravelly loamy			0	0-15	60-100	50-95	35-75
			sand, loamy							
			sand, sand							
				_		_		_		
Sandy loam,   SC, SM   A-2-4, A-4   0   0-5   85-100   80-100     Loamy sand,   SM, SP-SM   A-3   0   0-5   55-100   50-95     Coarse sand,   SM, SP-SM   A-3   0   0-5   55-100   50-95     Coarse sand,   SM, SP-SM, SM   A-3   0   0-5   55-100   50-100     Coarse sand,   SP-SM, SM   A-3   0   0-5   55-100   50-100     Sand, coarse	Cress	0-3	Sandy loam		A-2-4, A-4	0	0-2	85-100	80-100	
fine sandy		3-15	Sandy loam,			0	0-5	85-100	80-100	55-80
Loamy sand,   SM, SP-SM   A-3   0   0-5   55-100   50-95     coarse sand,   SM, SP-SM   A-3   0   0-5   55-100   50-95     coarse sand,   SP-SM, SM   A-3   0   0-5   55-100   50-100     coarse sand, SM   SP-SM			fine sandy	_		_				
Loamy sand,   SM, SP-SM   A-3   0   0-5   55-100   50-95     coarse sand,			loam			_		_		
Gravelly sand,		15-31		SP-SM	A-3	0	0-2	22-100	20-95	20-75
gravelly sand,			coarse sand,	_		_				
very gravelly			gravelly sand,	_		_		_		
loamy sand			very gravelly			_		_		
Gravelly loamy   SP-SM, SM   A-3   0   0-5   55-100   50-100   sand, coarse   sand, gravelly   sand, very   sand   SP-SM,   A-1, A-2, A-3   0   0-5   30-100   25-95   coarse sand   SP, SP-SM   coarse sand   SP, SP-SM   S			loamy sand			_		_		
sand, coarse		31-36	Gravelly loamy		A-3	0	0-5	25-100	50-100	20-75
sand, gravelly										
gravelly loamy						_				
gravelly loamy    sand   Stratified sand   SP, GP-GM,   A-1, A-2, A-3   0   0-5   30-100   25-95     to very   GP, SP-SM						_		_		
sand			gravelly loamy			_				
Stratified sand   SP, GP-GM,			sand	_		_				
		36-60		GP-GM,	A-2,		0-5	30-100	25-95	15-65
gravelly			to very			_				
			gravelly	_		_		_		
			coarse sand	_		_		_		

Table 23. -- Engineering Index Properties -- Continued

Map symbol Depth and soil name In In I653C: Stanberry 0-1 3-19	USDA texture	Thified AAS				י מ	sieve number-	mber-
and 1 name crry		Th: f			,			
erry		1	C E	>IO 3-IO	3-10	-	0	
erry				Pot	Pct			
erry								
1-3	_	PT	A-8	0 - 5	0-7	100	100	-
3-19	decomposed plant material							
3-19	Sandy loam,	CL-ML, ML,	A-2-4, A-4	0 - 5	0-7	90-100 85-100		55-95
3-19	loam, fine	SC-SM, SM		_	_		_	
3-19	sandy loam			_	_			
	Sandy loam,	CL-ML, ML,	A-2-4, A-4	0-5	0-7	90-100 70-100		55-95
	loam, gravelly	SC-SM, SM						
	line sandy							
19-34	Gandir loam	מאַ	A-7 A-7	L C	- 2	75-100   70-100   40-70	70-100	40-70
	gravelly sandy			0				-
	loam					_		
24-32	Sandy loam,	SC-SM	A-2-4, A-4	0 - 5	0-7	75-100	5-100   70-100	40-70
_	gravelly sandy	_	_	_	_		_	
_	_							
32-42	_	SM, SC-SM	A-1-b, A-2-4	0-5	0-7	75-100	5-100 70-100	35-75
	gravelly loamy							
-	sand							I I
42-80	Loamy sand,	GC-GM, GM,	A-1-b, A-2-4	0-2	0-7	60-95	25-90	30-75
	gravelly loamy	SC-SM, SM						
	sand							
Parkfalls 0-5	Sandy loam	MS	A-2-4	0 - 5	0-7	90-100	85-100	55-70
8-10	Sandy loam,	SC-SM,	A-2, A-4	0-5	0-7	90-100 85-100	85-100	55-95
_	fine sandy						_	
_								
8-17	Sandy loam,	SC-SM, CL-ML,	A-2, A-4	0 - 5	0-7	90-100 70-100		55-95
_	loam, gravelly	ML, SM		_	_		_	
	fine sandy							
7	Loam	700		ш С	1	1000		1
06-14	Sanay roam,	SC-SM, SM	#-W '7-W	n -		00T-C/		0 / - 0 #
	gravelly sandy							
56-08	Sandy loam	מיים אַ	A-2 A-4	ر ا ا	0-7	75-100 70-100 40-70	70-100	40-70
	gravelly sandy			)		9		)   
	loam			_				
33-48	Sandy loam,	SC-SM	A-1-b, A-2	0-5	0-7	75-100	5-100 70-100	35-75
_	gravelly sandy							
_	loam						_	
48-80	Loamy sand,	SM,	A-1-b, A-2	0 - 5	0-7	60-95	25-90	30-75
	gravelly loamy	GM, SC-SM						
	sand							

Table 23. -- Engineering Index Properties -- Continued

Man gymbol	Denth	TISDA textiire	Classi	Classification	Fragm	Fragments	Per	Percentage pass	pass
and and	nebru	רפערת פ			>10	3-10		חוו פאפווי	- TACILITY
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	п				Pct	Pct			
16530:									
Wozny	0 - 3	Muck	PT	A-8	2-3	0	100	100	100
_	3-17	Silt loam	CL-ML, ML	A-4	0-5	0-7	80-100	80-100 75-100 70-10	70-10
	17-37	Silt loam	CL-ML, CL	A-4	0 - 5	0-7	80-100	80-100 75-100 70-10	70-10
	37-56	Stratified	SC-SM, SM	A-1, A-2	0-5	0-7	60-100 50-90	50-90	30-90
		sandy loam to gravelly loam							
	56-80	Loamy sand, gravelly loamy	SC-SM, SM	A-1, A-2-4	0 - 5	0-7	60-100   50-90	50-90	25-70
i t									
2015.					_				
Pits									
2050.									
Landfil1									
30118.									
Barronett	6-0	Silt loam	CL. CL-ML. M	ML   A-4, A-6	0	0	98-100	95-100	90-10
	9-16	Silt loam	CL-ML,		0	0	98-100	95-100	90-10
	16-34	Silt loam,		A-4, A-6	0	0	98-100		
		silty clay		-					
		loam		. —	_				
_	34-60	Stratified silt CL-ML,	CL,	ML   A-4	0	0	98-100 95	95-100	85-10
		loam to very		_	_				
		fine sand							
3125A:									
Meehan	0-5	Loamy sand	SM	A-2	0	0	95-100	90-100	60-75
	2-8	Sand	SM	A-2	0	0	95-100	90-100	60-75
_	8-28	Sand	SM	A-2	0	0	95-100	95-100   90-100	60-75
_	28-60	Sand	SM	A-2, A-3	0	0	95-100	90-100	60-10
3126A:									
Wurtsmith	6-0	Loamy sand	SM	A-2	0	0	85-100	85-100 75-100	55-75
	9-37	Coarse sand,	SM	A-2, A-3	0	0	85-100	85-100   75-100   50-70	50-70
		sand		. —	_				
	37-60	Sand, coarse	SM	A-2, A-3	0	0	85-100	85-100   75-100   50-70	50-70
		sand							

Table 23. -- Engineering Index Properties -- Continued

The composed   The				Classif	Classification	Fragments	ents	Per	Percentage	pass
Inname   I	Map symbol	Depth	USDA texture					Δ.	ieve nu	mber-
### Per Per Per Per Per Per Per Per Per Per	and soil name			Unified	AASHTO	>10 inches	3-10	4	10	40
### PT   A-8   0 0 100 100 100 100 100 100 100 100 1	1			1				•	2	2
2-5   Highly   PT   A-8   0   0   100		H H				ь Б	FO T			
2-5 Loamy sand   SP-SM, SM, A-1-b, A-2-4, 0   0   95-100   85-100	3276A:	0-2	; ;	E-	00  -  -		c	00	0	
15-26   Loamy sand   SP-SK, SK,   A-1-b, A-2-4,   0   0   95-100   85-100   10-20		1	dogomnogod -	14	2 _	>	•	 -	9	 
2-5   Loany sand   SC-SM   A-1-b, A-2-4, 0   0   95-100   85-100			nlant material							
S-8   Loamy sand,   SP-SM, SM,   A-1-b, A-2-4,   0   0   95-100   85-100		2-5	Loamy sand			0	0	95-100	85-100	25-75
5-8   Loamy sand,   SP-SK, SM,   A-1-b, A-2-4,   0   0   95-100   85-100     8-16   Loamy sand,   SC-SK, SM,   A-1-b, A-2-4,   0   0   95-100   85-100     8-16   Loamy sand,   SC-SK, SM,   A-1-b, A-2-4,   0   0   95-100   85-100     8-16   Loamy sand, loamy   SC-SK, SM,   A-1-b, A-2-4,   0   0   95-100   85-100     16-28   Sand, loamy   SC-SK, SM,   A-1-b, A-2-4,   0   0   95-100   85-100     28-60   Sand, coarse   SC-SK, SM,   A-2-4, A-3   0   0   95-100   85-100     and coarse   SC-SK, SM,   A-2-4, A-4   0   0   95-100   85-100     and coarse   SC-SK, SM,   A-2-4, A-4   0   0   0   95-100   85-100     and coarse   SC-SK, SM,   A-2-4, A-4   0   0   0   95-100   85-100     and coarse   SC-SK, SM,   A-2-4, A-4   0   0   0   95-100   85-100     and coarse   SC-SK, SM,   A-2-4, A-4   0   0   0   95-100   85-100     and coarse   SC-SK, SM,   A-2-4, A-4   0   0   0   95-100   95-100     and coarse   SC-SK, SM,   A-2-4, A-4   0   0   0   95-100   95-100     and coarse   SC-SK, SM,   A-2-4, A-4   0   0   0   95-100   95-100     and coarse   SC-SK, SM,   A-2-4, A-4   0   0   0   95-100   95-100     and coarse   Sandy loam,   SC-SK, SM,   A-2-4, A-4   0   0   0   0   95-100   95-100     and coarse   Sandy loam,   SC-SK, SM,   A-2-4, A-4   0   0   0   0   0   0   0     and coarse   Sandy loam,   SC-SK, SM,   A-2-4, A-4   0   0   0   0   0   0   0   0     and coarse   Sandy loam,   SC-SK, SM,   A-2-4, A-4   0   0   0   0   0   0   0   0   0     and coarse   Sandy loam,   SC-SK, SM,   A-2-4, A-4   0   0   0   0   0   0   0   0   0		1	•							
## Send, loamy   SC-SM		2-8	Loamy sand,			0	0	95-100	85-100	25-75
8-16   Coarse sand   SC-SM, SM, A-1-b, A-2-4, 0 0   95-100   85-100     sand, loamy   SC-SM   A-3   0   0   95-100   85-100     sand, coarse   SG-SM   A-1-b, A-2-4, 0   0   95-100   85-100     sand, coarse   SG-SM   A-1-b, A-2-4, 0   0   95-100   85-100     sand, coarse   SG-SM   A-1-b, A-2-4, 0   0   95-100   85-100     sand, coarse   SG-SM, SM   A-2-4, A-3   0   0   95-100   85-100     sand, coarse   SG-SM, SM   A-2-4, A-4   0   0   95-100   85-100     sand, coarse   SG-SM, SM   A-2-4, A-4   0   0   95-100   85-100     sand, coarse   SG-SM, SM   A-2-4, A-4   0   0   0   0   0     sand, coarse   SG-SM, SM   A-2-4, A-4   0   0   0   0   0     sand, coarse   SG-SM, SM   A-2-4, A-4   0   0   0   0   0     sand, coarse   SG-SM, SM   A-2-4, A-4   0   0   0   0   0     sand, loam, gravelly   SG-SM, SM   A-2-4, A-4   0   0   0   0   0     sandy loam, gravelly   SG-SM, SM   A-2-4, A-4   0   0   0   0   0     sandy loam, gravelly   SG-SM, SM   A-2-4, A-4   0   0   0   0   0     sandy loam, gravelly fine   SG-SM, SM   A-2-4, A-4   0   0   0   0   0     sandy loam, gravelly fine   SG-SM, SM   A-2-4, A-4   0   0   0   0   0     sandy loam, gravelly fine   SG-SM, SM   A-2-4, A-4   0   0   0   0   0     sandy loam, gravelly fine   SG-SM, SM   A-2-4, A-4   0   0   0   0   0     sandy loam, gravelly fine   SG-SM, SM   A-2-4, A-4   0   0   0   0   0   0     sandy loam, gravelly fine   SG-SM, SM   A-2-4, A-4   0   0   0   0   0   0   0     sandy loam, gravelly fine   SG-SM, SM   A-2-4, A-4   0   0   0   0   0   0   0   0     sandy loam, gravelly fine   SG-SM, SM   A-2-4, A-4   0   0   0   0   0   0   0   0   0	. —			SC-SM	A-3			_		
16-28   Sandy loamy   SC-SM, SM, A-1-b, A-2-4, 0   0   95-100   85-100     16-28   Sand, loamy   SC-SM, A-1-b   A-2-4, A-3, 0   0   95-100   85-100     16-28   Sand, loamy   SC-SM, SM, A-1-b   A-2-4, A-3, 0   0   95-100   85-100     16-28   Sand, coarse   SC-SM, SM, A-1-b   A-2-4, A-3   0   0   95-100   85-100     16-28   Sand, coarse   SC-SM, SM, A-1-b   A-2-4, A-3   0   0   95-100   85-100     16-28   Sandy loam, SC-SM, SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, SC-SM, SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SC-SM, SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SC-SM, SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SC-SM, SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SC-SM, SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SC-SM, SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SC-SM, SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SC-SM, SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SM, SC-SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SM, SC-SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SM, SC-SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SM, SC-SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SM, SC-SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SM, SC-SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SM, SC-SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SM, SC-SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SM, SC-SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy loam, GRAPSH  SM   A-2-4, A-4   0   0   0-15   55-100   50-98     16-28   Sandy l										
16-28   Sand, loamy   SC-SM   A-3   0   0   95-100   85-100	. —	8-16	Loamy sand,			0	0	95-100	85-100	25-75
16-28   Sand, loamy   SG.SM						_		_	_	
16-28   Sand, loamy   SM, SP-SM   A-2-4, A-3,   0   0   95-100   85-100			coarse sand		_			_	_	
Sand, coarse   SC-SM		16-28	Sand, loamy	SM, SP-SM,		0	0	95-100	85-100	25-75
Sandy coarse   SM, SP-SM   A-1-b, A-2-4,   0   0   95-100   85-100			_	SC-SM	A-1-b	_		_	_	
28-60   Sand, coarse   SM, SP-SM   A-1-b, A-2-4, 0   0   95-100   85-100			sand					_	_	
enning, stcony   0-5   Sandy loam   SC-SM, SM   A-2, A-4   0-5   0-7   80-100   75-98     15-26   Sandy loam   SC-SM, SM   A-2, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SC-SM, SM   A-2, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SC-SM   SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SC-SM   SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SC-SM   SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SC-SM   SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam   SC-SM   SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   SC-SM   SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   SC-SM   SM   S		28-60		SM, SP-SM	A-1-b, A-2-4,	0	0	95-100	85-100	25-70
Strony			sand		A-3					
	3312B:									
15-20   Sandy loam,   SC-SM, SM   A-2, A-4   0   0-15   55-100   75-98     15-20   Sandy loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam, gravelly   SC-SM, SM   SC-SM, SM   SC-SM, SM   SC-SM   SC-SM, SM   SC-SM   SA-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam, gravelly fine   Sandy loam,	Glendenning,							_		
5-15   Sandy loam,   SC-SM, SM   A-2, A-4   0   0-15   55-100   50-98     10am, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     15-20   Sandy loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     1 cam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     1 cam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     1 cam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     1 cam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     1 cam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     1 cam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     2 candy loam, gravelly fine   Sm, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     3 candy loam, gravelly fine   Sandy loam, gravelly fine	very stony	0-5			A-2, A-4	0-5	0-7	80-100	_	50-60
fine sandy   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     fine sandy   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   Sc-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   Sc-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   Sc-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   Sc-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   Sc-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   Sc-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, gravelly fine   Sm, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     gravelly fine   Sm, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam		5-15	Sandy loam,		A-2, A-4	0	0-15	55-100	_	35-75
loam, gravelly			fine sandy			_		_		
Loam,   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98   10am,   gravelly					_	_		_	_	
Sandy loam,   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     Loam, gravelly			loam		_			_	_	
fine sandy   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam   Sandy loam, SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     gravelly fine   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     gravelly fine   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     gravelly fine   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     loam   Sandy loam   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     loam   S		15-20	Sandy loam,			0	0-15	25-100	_	35-75
loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     fine sandy   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     gravelly fine   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam, SM   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98						_		_	_	
Joam   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     Ine sandy   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     Ine sandy   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     Ine sandy   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     Ine sandy   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     Ine sandy   Ine sandy   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     Ine sandy   SM, SC-SM   A-2-4, A-4   0   O-15   55-100   50-98     Ine sandy   Ine sand										
Sandy loam,   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     Ine sandy			loam			-	1	-		1
loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly   SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     loam   Sandy loam,   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     gravelly fine   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     sandy loam   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     SM   SM   SM   SM   SM   SM   SM		20-26	Sandy Loam,			>	0-T2	00T-99	- 20 - 00	35-75
Joam   Sandy loam,   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98   loam, gravelly										
Sandy loam,   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     Loam, gravelly										
loam, gravelly   fine sandy   Sc-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98		26-40	Sandy loam,			0	0-15	55-100		35-75
fine sandy						_		_	_	
loam   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98     loam, gravelly	_		fine sandy		_	_		_	_	
Sandy loam,   SC-SM, SM   A-2-4, A-4   0   0-15   55-100   50-98   10am, gravelly			loam		_	_		_	_	
loam, gravelly    fine sandy		40-65	Н			0	0-15	25-100	20-98	35-75
fine sandy       loam       Sandy loam,       SM, SC-SM       A-2-4, A-4       0       0-15       55-100       50-98         gravelly fine       sandy loam						_		_	_	
Loam   Sandy loam,   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98     gravelly fine   sandy loam								_		
Sandy loam,   SM, SC-SM   A-2-4, A-4   0   0-15   55-100   50-98   gravelly fine   sandy loam			loam							
gravelly fine sandy loam	-	65-80	Sandy loam,	SM, SC-SM	A-2-4, A-4	0	0-15	25-100	20-98	35-75
sandy Loam			gravelly fine							
			sandy Loam							

Table 23. -- Engineering Index Properties -- Continued

		_		Classification	ication	Fragments	nents	Per	Percentage	pass
Map symbol	Depth	USDA t	USDA texture					Δ.	sieve number-	mber-
and soil name				Unified	AASHTO	>10 inches	>10   3-10 inches inches	4	10	40
	п					Pct	Pct			
3312B:										
Glendenning	0-7	Sandy 1	loam	O2	A-2, A-4	0	0-15	80-100 75-98		50-60
	7-15	Sandy 1	loam,	SM, SC-SM	A-2, A-4	0	0-15	55-100   50-98		35-75
			gravelly							
-			,							
_	15-20	Sandy 1	loam,	SC-SM, SM	A-2-4, A-4	0	0-15	55-100 50-98	20-98	35-75
		OĮ.	sandy							
			gravelly							
	20-26	Sandv 1	loam.	SM. SC-SM	A-2-4 . A-4	0	0-15	55-100 50-98	50 - 98	35-75
	0 1		sandy			 	1	-	0	1
			gravelly							
_			_			_		_		
_	26-40	$\overline{}$	loam,	SM, SC-SM	A-2-4, A-4	0	0-15	55-100 50-98	20-98	35-75
		_	gravelly							
			sandy							
	:	loam				_			-	
	40-65		loam,	SM, SC-SM	A-2-4, A-4	0	0-15	25-100	20-98	35-75
			gravelly							
			sandy							
		loam								
	65-80	Sandy loam,	oam,	SC-SM, SM	A-2-4, A-4	0	0-15	22-100	20-98	35-75
		gravel	gravelly fine							
		sandy loam	loam							
3336A:										
Fenander	6-0	Fine sa	Fine sandy loam	SM, ML	A-4	0	0	95-100 93-100		75-85
_	9-15	Fine sa	sandy	SM, SC-SM,	A-4	0	0	95-100 93-100		75-90
_			sandy	ML, CL-ML		_		_	_	
			silt							
_	1 1	Loam	1	TW 10			c	001	001	7 10 0
	77-67	מ	fine		r 4	>	>	001		
			loam,							
			oam							
	27-33	Fine sandy	ndy	SC-SM	A-4	0	0	95-100	93-100	75-90
		loam,	sandy			_			_	
		loam,	loam			_		_	_	
	33-80		ied	SC-SM	A-2-4, A-4	0	0	95-100 93-100	93-100	45-85
		loamy	fine							
		sand t	sand to fine							
		sandy loam	loam							
_			_			_		_	_	

Table 23. -- Engineering Index Properties -- Continued

and  In   Nucky peat   PT   A-8   0   0   0   0   0   0   0    In	Man symbol	Denth	TISDA texture		Classification	lcation	Fragments	ents	Per	Percentage passi	passi mber
1 mame   Tn	and	1 14 1		  - 			>10	3-10			
The control of the				_	Unified	AASHTO	inches	inches		10	40
y		In					Pct	Pct			
y	3403A:										
13-60 Muck   PT   A-8   0   0   100   100	Loxley	0-13	Mucky peat	P		A-8	0	0	100	100	100
Name		13-60	Muck			A-8	0	0	100	100	100
36-66   Loam, sailt   CL-MI, SC-SM, A-4, A-2-4   0   0-2   80-100   75-100	Beseman	0-36	Muck			A-8	0	0	100	100	100
10am, sandy   CL	_	36-60		CI			0	0-2	80-100	75-100	45-100
Name					ų.						
8-38   Muck   PT	Dawson	0 - 8	Peat	P		A-8	0	0	100	100	:
38-40   Silt loam, fine		8-38	Muck	P		A-8	0	0	100	100	-
loam, fine   sand, mucky   sand, mucky   sand, mucky   sand, mucky   sand, mucky   sand, very   SM, SP   A-3, A-4	-	38-40	Silt loam,	M			0	0	100	100	50-100
40-60   Sand, mucky   Sand   Sane				_			_		_		
40-60   Sand, very   SM, SP   A-1, A-2,   0   0   45-100   35-100     sand, very   SM, SP   A-3, A-4											
Teek   O-4   Silt loam   ML, CL-ML   A-4   O-2   O-5   90-100   85-100     13-19   Silt loam,   SC, SM   A-1-b, A-2-4   O-5   90-100   85-100     19-32   Sandy loam,   SC, SM   A-1-b, A-2-4   O-5   O-7   60-100   50-90     19-34   Gravelly sandy   SC-SM, SM,   A-1-b, A-2-4   O-5   O-7   60-100   50-90     19-35   Sandy loam   SC-SM, SM,   A-1-b, A-2-4   O-5   O-7   60-100   50-90     19-36   Gravelly loam   SC-SM, SM,   A-1-b, A-2-4   O-5   O-7   60-100   50-90     19-37   Sandy loam   SC-SM, SM,   A-1-b, A-2-4   O-5   O-7   60-100   50-90     19-38   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   60-100   50-90     19-39   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   60-100   50-90     19-39   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   60-100   S0-90     19-30   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   60-100   S0-90     19-30   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   60-100   S0-90     19-30   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   60-100   S0-90     19-30   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   60-100   S0-90     19-31   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   60-100   S0-90     19-32   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   S0-100   S0-90     19-30   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   S0-100   S0-90     19-31   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   S0-100   S0-90     19-32   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   S0-100   S0-90     19-32   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   S0-100   S0-90     19-32   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   S0-100   S0-90     19-32   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   S0-100   S0-90     19-33   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   S0-100   S0-90     19-34   Sandy loam   SP-SM   A-1-b, A-2-4   O-5   O-7   S0-100   S0-90     19-35   Sandy loam   SP-SM		40-60			מם-מש	- 4 C - 4	c	c	45-100	25-100	15.00
Sand, Very   Sand, Very   Gravelly very		0		- 	, 25-22,	/7-U /T-U	>	>	) 	    	1
fine sand   fine sand			sand, very			A-3, A-4					
reek 0-4 Silt loam, silt   CL-ML   A-4   0-2   0-5   90-100   85-100   13-19 Silt loam,   SC, SM   A-1-b, A-2-4   0-5   90-100   85-100   13-19 Silt loam,   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90   19-32 Sandy loam   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90   19-32 Sandy loam   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90   10-am, gravelly   SM, SC   A-1-b, A-2-4   0-5   0-7   60-100   50-90   10-am, sandy   SM, SC   A-1-b, A-2-4   0-5   0-7   60-100   50-90   10-am, sandy   SM, SC   A-1-b, A-2-4   0-5   0-7   60-100   50-90   10-am, loam   SP-SM   A-1, A-2-4   0-5   0-7   60-100   50-90   10-am, loam   SP-SM   SP-SM   A-1, A-2-4   0-5   0-7   60-100   50-90   10-am, loam   SP-SM   S			gravelly ve	ry							
reek 0-4 Silt loam ML, CL-ML A-4 0-2 0-5 90-100 85-100			fine sand								
	3424C:										
Silt loam, silt   CL-ML, ML   A-4   0-2   0-5     Silt loam,   SC, SM   A-1-b, A-2-4   0-5   0-7     Gravelly sandy	Frogcreek	0 - 4		MI	', CL-ML	A-4	0-2	0-5	90-100	85-100	80-100
Silt loam,   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90   gravelly sandy	_	4-13		11t   CI	-ML, ML		0-2	0-5	90-100	85-100	80-100
gravelly sandy	_	13-19	Silt loam,	_	, SM		0-5	0-7	001-09	20-90	30-90
Loam, loam, sandy loam   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90     Sandy loam   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90     sandy loam   Gravelly sandy   SM, SC   A-1-b, A-2-4   0-5   0-7   60-100   50-90     loam, sandy   SC-SM, SM, A-1, A-2-4   0-5   0-7   60-100   50-90     sand, loamy   SP-SM	_		gravelly sa	ndy			_		_	_	
Sandy loam   Sandy loam   Sandy loam,   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90     Loam, gravelly			loam, loam,								
Sandy loam,   SC, SM   A-1-b, A-2-4   0-5   0-7   60-100   50-90   10am, gravelly			sandy loam	_							
Loam, gravelly   Sandy   SM, SC   A-1-b, A-2-4   0-5   0-7   60-100   50-90		19-32	Sandy loam,			A-1-b, A-2-4	0-2	0-7	60-100	20-90	30-80
Gravelly sandy   SM, SC   A-1-b, A-2-4   0-5   0-7   60-100   50-90   10am, sandy											
Gravelly sandy   SM, SC   A-1-b, A-2-4   0-5   0-7   60-100   50-90   10am, sandy   A-1, A-2-4   0-5   0-7   60-100   50-90   Sand, loamy   SP-SM   A-1, A-2-4   0-5   0-7   60-100   50-90   sand			sanay Loam								
loam, loam   SC-SM, SM,   A-1, A-2-4   0-5   0-7   60-100   50-90   sand, loamy   SP-SM   sand		32-46	Gravelly san			A-1-D, A-2-4	ر د - 0	/-0	00T-09	06-06	30-80
Gravelly loamy   SC-SM, SM,   A-1, A-2-4   0-5   0-7   60-100   50-90   sand, loamy   SP-SM   sand	-		macl macl								
SP-SM		46-80	Gravelly loa			A-1, A-2-4	0 - 5	0-7	60-100	50-90	25-70
			sand, loamv	_							
	-										

Table 23. -- Engineering Index Properties -- Continued

Map symbol	Depth	USDA texture	Classif	Classification	Fragments	lents	Per	Percentage pass	pass
and	ļ				>10	3-10			
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	ц				Pct	Pct			
3424C:									
Magroc	0-2	Silt loam	CĽ,	ML   A-4	0	0-15	90-100	90-100   75-100   70-10	70-10
	2-11	Silt loam	CL-ML, CL, MI	ML A-4	0	0-15	90-100	90-100   75-100   70-10	70-10
	11-22	Silt loam,	CL, ML, CL-ML A-4	N-4	0	0-15	65-100	65-100   55-100   50-10	50-10
		gravelly silt		_		_		_	
		loam							
	22-30	$\overline{}$	SM, SC	A-1, A-2, A-4	0	0-45	60-95	20-90	35-85
		loam, gravelly		_	_	_	_	_	
		sandy loam		_		_	_	_	
	30-45	Gravelly loamy	SC-SM, SC, SN	SM A-1-b, A-2	0	0-45	60-95	20-90	30-75
		sand, loamy						_	
		sand		_					
	45-50	Gravelly loamy	SC, SC-SM, SN	SM A-1-b, A-2	0	0-45	60-95	20-90	30-75
		sand, loamy		_		_	_	_	
		sand		_	_	_	_	_	
	20-80	Unweathered	:	:	0	0	0	0	0
		bedrock		_					
				_		_		_	
Stinnett	0 - 4	Silt loam	CL-ML, ML	A-4	0-2	0-2	90-100	85-100	80-10
	4-7	Silt, silt loam CL-ML,	CL-ML, ML	A-4	0-2	0-5	90-100	90-100  85-100  70-10	70-10
	7-18	Silt, silt	loam CL-ML, ML	A-4	0-2	0-5	90-100	90-100 85-100 70-10	70-10
	18-29	Silt loam	CL, CL-ML	A-4	0-2	0-5	90-100	90-100 85-100 80-10	80-10
	29-34	Loam, sandy	SM, SC	A-1-b, A-2-4,	0-2	0-7	60-100	20-90	30-90
		loam, gravelly		A-4		_	_	_	
		sandy loam		_	_	_	_	_	
	34-41		SC, SM	A-1-b, A-2-4,	0-5	0-7	001-09	20-90	30-90
		loam, gravelly		A-4					
		sandy loam		_				_	
	41-55	Loamy sand,	SC-SM, SM	A-1, A-2-4	0-5	0-7	60-100   50-90	20-90	25-70
		gravelly loamy		_		_	_	_	
		sand							
	22-80	Loamy sand,	SC-SM, SM	A-1, A-2-4	0-2	0-7	60-100   50-90	20-90	25-70
		gravelly loamy		_	_		_	_	
		sand							
Kock outcrop.									
		_	_	_	_	_	_	_	

Table 23. -- Engineering Index Properties -- Continued

The state   The	Man exmbol	Denth	TISDA +	4	Classi	Classification	Fragments	ents	Pe	rercentage pas	e pas
1   1   1   1   1   1   1   1   1   1	and	: 2 2 3 4 — —	5 5 — —	9			>10	3-10	•		
In   In   In   In   In   In   In   In	soil name				Unified	AASHTO	inches	inches	4	10	40
Nuck		In					Pct	Pot			
Name	3446A:										
3-8   Loamy sand,   SM   A-2, A-3   0   0   80-100   75-100     8-16   Sand, loamy   SM   A-2, A-3   0   0   80-100   75-100     8-16   Sand, loamy   SM   A-2, A-3   0   0   0   80-100   75-100     8-2   Sand, loamy   SM   A-2, A-3   0   0   0   80-100   75-100     8-2   Sand, loamy   SM   A-2, A-3   0   0   0   80-100   75-100     8-3   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   90-100   85-100     8-3   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   90-100   85-100     8-3   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   90-100   85-100     8-3   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   90-100   85-100     8-3   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   90-100   85-100     8-3   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   90-100   85-100     8-3   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   90-100   85-100     8-3   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   90-100   85-100     8-4   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   90-100   85-100     8-4   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   0   0     8-5   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   0   0     8-5   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   0   0     8-7   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   0     8-7   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0   0     8-7   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0     8-7   Sand, loamy   SM   SC-SM   A-2, A-3   0   0   0     8-8   Sand, coarse	Newson	0-3	Muck		PT	A-8	0	0	100	100	-
16-22   Sand, loamy   SW   A-2, A-3   0   0   80-100   75-100   80-1		3-8		nd,	SM		0	0	80-100	75-100	50-7
16-22   Sand, loamy   SM   A-2, A-3   0   0   80-100   75-100   85-100			>	and			_				
16-22   Sand, loamy   SM   A-2, A-3   0   0   80-100   75-100		8-16		amy	SM		0	0	80-100	75-100	50-7
16-22   Sand, loamy   SM   A-2, A-3   0   0   80-100   75-100     22-60   Sand, loamy   SM   A-2, A-3   0   0   80-100   75-100     3-12   Sand, loamy   SM   SC-SM, SM   A-2-4   A-3   0   0   90-100   85-100     32-75   Sand, loamy   SM, SC-SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loamy   SM, SC-SM   A-2-4, A-3   0   0   90-100   85-100     3-25   Sand, loamy   SM, SC-SM   A-2-4, A-3   0   0   90-100   85-100     3-25   Sand, loamy   SM, SC-SM   A-2-4, A-3   0   0   90-100   85-100     3-25   Sand, loamy   SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100     3-26   Sand, loamy   SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100     3-275   Sand, loamy   SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100     3-28   Sand, loamy   SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100     3-28   Sand, loamy   SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100     3-28   Sand, loamy   SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100     3-28   Sand, loamy   SC-SM, SM   A-2-4, A-3   0   0   0   90-100   85-100     3-28   Sand, loamy   SC-SM, SM   A-2-4, A-3   0   0   0   90-100   85-100     3-28   Sand, loamy   SC-SM, SM   A-2-4, A-4   0   0   0   0   0   0     3-28   Sand, loamy   SC-SM, SM   A-1   0   0   0   0   0   0     3-28   Sand, coarse   Sand, coa											
Sand, loamy and   A-2, A-3   0   0   80-100   75-100		16-22		amy	SM	_	0	0	80-100	75-100	50-7
122-60   Sand, loamy   SM   A-2, A-3   0   0   80-100   75-100							_				
Sand   Sc.SM, SM   A-2-4   A-3   0   90-100   85-100		22-60		amy	SM		0	0	80-100	75-100	50-7
.um			sand								
3-32   Sand, loamy sand   SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100	3448B:										
3-32   Sand, loamy   SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loamy   SM, SC-SM   A-2-4, A-3   0   0   90-100   85-100     75-80   Sand, loamy   SM, SC-SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loamy   SM, SC-SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loamy   SM, SC-SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loamy   SC-SM   SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loamy   SC-SM   SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loam   SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loam   SM   A-2-4, A-3   0   0   0   90-100   85-100     32-75   Sand, loam   SM   A-2-4, A-3   0   0   0   90-100   85-100     32-75   Sand, loam   SM   A-2-4, A-3   0   0   0   90-100   85-100     32-75   Sand, loam   SM   A-2-4, A-4   0   0   0   0   0     32-75   Sand, loam   SM   A-2-4, A-3   0   0   0   0   0     32-75   Sand, loam   SM   A-2-4, A-3   0   0   0   0   0     32-75   Sand, loam   SM   A-2-4, A-3   0   0   0   0   0     32-75   Sand, loam   SM   A-2-4, A-3   0   0   0   0   0     32-80   Sand, gravelly   SP-SM   A-1   0   0   0   0   0     32-80   Sand, gravelly   SP-SM   A-1   0   0   0   0   0     32-80   Sand, gravelly   SP-SM   A-1   0   0   0   0   0     32-80   Sand, gravelly   SP-SM   A-1   0   0   0   0   0     32-90   Sand, gravelly   SP-SM   A-1   0   0   0   0   0     32-90   SP-SM   A-1   0   0   0   0   0     32-90   SP-SM   A-1   0   0   0   0   0     32-90   SP-SM   SP-SM   A-1   0   0   0   0   0     32-90   SP-SM   SP-SM   A-1   0   0   0   0   0     32-90   SP-SM   SP-SM   A-1   0   0   0   0   0     32-90   SP-SM   SP-SM   A-1   0   0   0   0   0     32-90   SP-SM   SP-SM   SP-SM   0   0   0   0   0   0     32-90   SP-SM   SP-SM   0   0   0   0   0   0   0     32-90   SP-SM   SP-SM   0   0   0   0   0   0   0   0     32-90   SP-SM   SP-SM   0   0   0   0   0   0   0   0   0     32-90   SP-SM   SP-SM   0   0   0   0   0   0   0   0   0	Grettum	0-3		nd		A-2-4	0	0	90-100	85-100	8-09
32-75   Sand, loamy   SM, SC-SM   A-2-4, A-3   0   0   90-100   85-100     75-80   Sand   Sand   SM, SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loamy   SM, SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loamy   SM, SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loamy   SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loamy   SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loamy   SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loam   SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loam   SM   A-2-4, A-4   0   0   0   90-100   85-100     32-75   Sand, loam   SM   A-2-4, A-4   0   0   0   90-100   85-100     42-53   Gravelly sand, SP-SM   A-1   0   0   0   7   70-90   65-85     Sand, coarse   Sand, gravelly   SP-SM   A-1   0   0   7   70-90   65-85     Sand, coarse   Sa		3-32		amy		A-	0	0	90-100	85-100	70-9
32-75   Sand, loamy   SM, SC-SM   A-2-4, A-3   0   0   90-100   85-100				•							
75-80   Sand   SM   A-2-4, A-3   0   0   90-100   85-100		32-75		amy			0	0	90-100	85-100	70-9
75-80   Sand   SM   A-2-4, A-3   0   0   90-100   85-100		_	sand				_				_
ake  0-3 Loamy sand SC-SM, SM A-2-4 A-3 0 0 90-100 85-100 sand sand loamy SM, SC-SM A-2-4, A-3 0 0 90-100 85-100 sand sand loamy SC-SM, SM A-2-4, A-3 0 0 90-100 85-100 sand loamy SC-SM, SM A-2-4, A-3 0 0 90-100 85-100 sand loamy SC-SM, SM A-2-4, A-3 0 0 90-100 85-100 sand loamy loam SM A-2-4, A-4 0 0 0-7 90-100 85-100 sand loamy sand SC-SM, SM A-1 0 0 0-7 90-100 85-100 sand, coarse sand coarse sand sand coarse sand sand sand sand sand sand sand sand		75-80	Sand		SM		0	0	90-100	85-100	55-7
ake  0-3 Loamy sand   SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100    32-75 Sand, loamy   SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100    32-75 Sand, loamy   SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100    32-75 Sand, loamy   SM   A-2-4, A-3   0   0   90-100   85-100    ake   0-6 Sandy loam   SM   A-2-4, A-4   0   0-7   90-100   85-100    17-42 Gravelly sand   SP-SM   A-1   0   0-7   70-90   65-85    17-42 Gravelly sand   SP-SM   A-1   0   0-7   70-90   65-85    18-2-4, A-4   0   0-7   70-90   65-85    18-2-5 Sand, coarse   Sand, c	3448C:										
3-32   Sand, loamy   SM, SC-SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loamy   SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100     sand   Sand   SM   A-2-4, A-3   0   0   90-100   85-100     32-75   Sand, loam   SM   A-2-4, A-3   0   0   0   90-100   85-100     32-75   Sand, loam   SM   A-2-4, A-4   0   0   0   0   0     32-75   Sand, loam   SM   A-1   0   0   0   0   0   0     32-75   Sand, coarse   Sa	Grettum	0-3		nd		A-2-4	0	0	90-100	85-100	60-8
32-75   Sand, loamy   SC-SM, SM   A-2-4, A-3   0   0   90-100   85-100		3-32		amv	۲,		0	0	90-100	85-100	
ake		)		Ī			, 	•	) 	) 	) - -
ake 0-6 Sandy loam SM A-2-4, A-3 0 0 0 90-100 85-100		32-75		amy			0	0	90-100	85-100	70-9
ake		_	sand				_				_
ake 0-6 Sandy loam SM A-4 0 0-7 90-100 85-100		75-80	Sand		SM		0	0	90-100	85-100	55-7
	3516A:										
Sandy loam   SC-SM, SM   A-2-4, A-4   0   0-7   90-100   85-100     Gravelly sand, SP-SM   A-1   0   0-7   70-90   65-85     Gravelly sand, Coarse   A-1   0   0-7   70-90   65-85     Sand, Gravelly   SP-SM   A-1   0   0-7   70-90   65-85     Sand, coarse   A-1   0   0-7   70-90   65-85     Sand, coarse   Sand, coarse   A-1   0   0-7   70-90   65-85	Slimlake	9-0	Sandy lo	am	SM	A-4	0	0-7	90-100	85-100	50-7
Gravelly sand,   SP-SM   A-1   0   0-7   70-90   65-85     loamy sand		6-17	Sandy lo	am			0	0-7	90-100	85-100	50-7
loamy sand		17-42	Gravelly	sand,	SP-SM	A-1	0	0-7	70-90	65-85	35-5
Gravelly sand,   SP-SM   A-1   0   0-7   70-90   65-85   sand, coarse			loamy s	and			_				_
sand coarse		42-53	Gravelly	sand,	SP-SM	A-1	0	0-7	70-90	65-85	35-5
sand   SP-SM   A-1   0   0-7   70-90   65-85     sand, coarse   sand				oarse			_				
Sand, gravelly   SP-SM   A-1   0   0-7   70-90   65-85     Sand, coarse							_				
		53-80		avelly	SP-SM	A-1	0	0-7	70-90	65-85	35-5
sand				oarse							
			sand								

Table 23. -- Engineering Index Properties -- Continued

			Classi	Classification	Fragments	ents	Per	Percentage pass	pass
Map symbol	Depth	USDA texture					02	sieve number-	mber-
and					>10	3-10			
soil name			Unified	AASHTO	inches inches	inches	4	10	40
	In				Pct	Pct			
3629B:									
Perida	6-0	Loamy sand	SM	A-2	0	0	90-100	90-100   80-100   60-75	60-75
_	9-43	Sand, loamy	SM	A-2	0	0	90-100	90-100  80-100  60-75	60-75
_		sand, fine	_	_	_				
_		sand	_	_	_				
_	43-45	Loamy sand,	SM	A-2	0	0	90-100	90-100  80-100  60-75	60-75
_		sand, fine	_	_	_				
_		sand	_	_	_			_	
_	45-60	Clay, silty	СН	A-7	0	0	100	100	90-10
_		clay			_				
_	60-74	Silty clay,	СН	A-7	0	0	100	100	90-10
_		clay	_	_	_			_	
	74-80	Sand	SM	A-2-4, A-3	0	0	90-100	90-100 85-100 55-75	55-75
M-W.									
Miscellaneous			_	. —	_			_	
water					_			_	
м.									
Water									
_			_		_			_	

Table 24.--Physical Properties of the Soils

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated)

Map symbol	Depth	   Clay	   Moist	Permea-	  Available	1	   Organic	Erosi	on fac	tors	erodi-	Wind  erodi-
and soil name			bulk density	bility	water  capacity	extensi-   bility	matter	   Kw	   Kf	   T	bility  group	
	T	Pct	g/cc	In/hr	In/in	Pct	Pct	KW	KL	-	group	Index
	In	PCt 	<b>g</b> /ee	In/nr	In/in	PCC	PCt		 	l I	 	
3A:		 	 			! 		1			 	i
Totagatic	0-4	0-0	0.15-0.45	6.00-20	0.35-0.45		55-85	.02	.02	5	8	0
	4-8		1.40-1.65		0.05-0.15		0.0-0.5	.10	.15	i	-	i
	8-17		1.40-1.65		0.05-0.15		0.0-0.5	.10	.15	i	İ	i
	17-28	0-10	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-10	.10	.15	İ	İ	i
	28-46	0-10	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-10	.10	.15	ĺ	İ	İ
	46-70	0-10	1.40-1.65	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.10	.15	ĺ	İ	İ
	70-80	0-10	1.40-1.65	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.10	.15	ĺ	İ	ĺ
Bowstring	0-38	0 - 0	0.10-0.35	0.20-6.00	0.35-0.45		70-90	.02	.02	3	8	0
	38-47	0-10	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.15			
	47-80	0 - 0	0.10-0.35	0.20-6.00	0.35-0.45		70-90	.02	.02			
Ausable	0-10		0.15-0.45		0.35-0.45		55-85	.02	.02	2	8	0
	10-60	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02	ļ		!
												!
22A:										_	-	= -
Comstock	0-8			0.60-2.00	0.20-0.24		2.0-4.0	.37	.37	5	5	56
	8-15			0.60-2.00	0.20-0.22		0.0-1.0	.43	.43			
	15-21			0.60-2.00	0.18-0.22		0.0-0.5	.43	.43			
	21-34 34-44			0.60-2.00	0.18-0.22		0.0-0.5	.43	.43			
	44-60		1.40-1.70	0.60-2.00 0.20-0.60	0.12-0.22		0.0-0.5	37	37		 	
	44-60 	8-20 	1.40-1.65	0.20-0.60	0.12-0.22	0.0-2.9	0.0-0.5	.3/	.3/	 	 	
24A:		 	 		i i	 	1	ì	 		 	i
Poskin	   0-9	13-17	1.35-1.55	0.60-2.00	0.21-0.24	0.0-2.9	2.0-4.0	.37	.37	4	5	56
	9-12		1.55-1.65		0.17-0.22		0.0-1.0	.43	.43	i -	-	
	12-19			0.60-2.00	0.17-0.22		0.0-1.0	.43	.43	i		i
	19-36			0.60-2.00	0.17-0.22		0.0-0.5	.43	.43	i	İ	i
	36-39		1.40-1.65		0.05-0.22	0.0-2.9	0.0-0.5	.24	.24	İ	İ	i
	39-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	į	į	į
		İ	į į		İ	ĺ	İ	İ	İ	ĺ	İ	İ
27A:												
Scott Lake	0-10	6-15	1.35-1.70	0.60-2.00	0.12-0.14	0.0-2.9	2.0-3.0	.24	.24	4	3	86
	10-17	6-15	1.40-1.70	0.60-2.00	0.11-0.13	0.0-2.9	0.0-0.5	.32	.32			
	17-24			0.60-2.00	0.11-0.13	0.0-2.9	0.0-0.5	.24	.24			
	24-31	1	1.45-1.70		0.02-0.10	!	0.0-0.5	.17	.17			
	31-80	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	ļ		!
										ļ		
28B:				0 60 0 00				0.4	0.4			
Haugen, very stony	0-4		1.40-1.65		0.12-0.14		1.0-3.0	.24	.24	5	8	0
	4-15		1.40-1.70   1.40-1.70		0.08-0.19		0.5-1.0	.24	.24			
	15-23	1			0.08-0.19		0.5-1.0	.24	.24			
	23-35 35-49			0.60-2.00			0.0-0.5	.24	.24		 	
	35-49   49-79			0.20-0.60 0.20-0.60				.24	.24		 	
	49-79   79-80			0.20-0.60			0.0-0.5	.24	.24	 	 	
	,,,=00 	0-13		3.01-0.00				•23	• 2 3	i		i
Haugen	0-7	6-14	1.40-1.65	0.60-2.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	5	3	86
2	7-15			0.60-2.00				.24	.24	i	İ	i
	15-23			0.60-2.00			0.5-1.0	.24	.24	i	į	i
	23-35			0.60-2.00				.24	.24	İ	į	i
	35-49			0.20-0.60			0.0-0.5	.24	.24	İ	İ	į
	49-79			0.20-0.60	•		0.0-0.5	.24	.24			
	79-80	6-15	1.80-1.90	0.01-0.06	0.02-0.05	0.0-2.9	0.0-0.5	.24	.24			
			l i		1			1				

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	   Clay	   Moist	Permea-	Available		Organic	Erosi	on fac		erodi-	Wind  erodi-
and soil name			bulk density	bility	water  capacity	extensi- bility	matter	Kw	   Kf		bility  group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
												ļ
28B: Rosholt, very stony	0-4	4-10	  1 50_1 60	0.60-6.00	0.12-0.14	   0.0-2.9	1.0-3.0	.24	   .24	   4	   3	86
ROSHOTC, Very Scony	4-10	1			0.05-0.16	1	0.0-1.0	.24	.24	<del>*</del> 	3	00
	10-14	1		0.60-6.00	0.05-0.16	1	0.0-1.0	.24	.24	İ		i
	14-28	6-15	1.65-1.75	0.60-6.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24	į	į	į
j	28-34	4-12	1.55-1.65	0.60-6.00	0.02-0.10	0.0-2.9	0.0-0.5	.10	.17	ĺ	İ	ĺ
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			ļ
Rosholt	0-8	4-10	  1 50-1 60	0.60-6.00	0.12-0.14	0 0-2 9	1.0-3.0	.24	   .24	   4	   3	86
ROSHOTC	8-10		1.70-1.80		0.05-0.16		0.0-1.0	.24	.24	<del>*</del> 	3	00
i	10-14			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	! 		i
i	14-28			0.60-6.00	0.06-0.19		0.0-0.5	.24	.24	İ	İ	i
	28-34	4-12	1.55-1.65	0.60-6.00	0.02-0.10	0.0-2.9	0.0-0.5	.10	.17	İ	į	į
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
28C:												
Haugen, very stony	0-4	   6-14	  1 40-1 65	0.60-2.00	0 12-0 14	   0 0-2 9	1.0-3.0	.24	.24	   5	3	   86
naugen, very scony	4-15			0.60-2.00	0.08-0.19		0.5-1.0	.24	.24	]	3	00
	15-23	1			0.08-0.19		0.5-1.0	.24	.24	İ	İ	İ
İ	23-35	,		0.60-2.00	0.05-0.16		0.0-0.5	.24	.24	İ	İ	İ
j	35-49	6-16	1.40-1.70	0.20-0.60	0.05-0.13	0.0-2.9	0.0-0.5	.24	.24	ĺ	İ	İ
	49-79	1		0.20-0.60	0.05-0.13	0.0-2.9	0.0-0.5	.24	.24			
	79-80	6-15	1.80-1.90	0.01-0.06	0.02-0.05	0.0-2.9	0.0-0.5	.24	.24			ļ
Haugen	0-7	6-14	  1 40-1 65	0.60-2.00	0.12-0.14	0 0-2 9	1.0-3.0	.24	   .24	   5	   3	86
naugen	7-15			0.60-2.00	0.08-0.19		0.5-1.0	.24	.24	]	3	00
i	15-23	1			0.08-0.19	1	0.5-1.0	.24	.24	İ	İ	i
	23-35	5-15	1.40-1.70	0.60-2.00	0.05-0.16	0.0-2.9	0.0-0.5	.24	.24	į	İ	į
j	35-49	6-16	1.40-1.70	0.20-0.60	0.05-0.13	0.0-2.9	0.0-0.5	.24	.24	ĺ	İ	ĺ
	49-79	1		0.20-0.60	0.05-0.13	1	0.0-0.5	.24	.24			
	79-80	6-15	1.80-1.90	0.01-0.06	0.02-0.05	0.0-2.9	0.0-0.5	.24	.24			
Rosholt, very stony	0-4	4-10	  1 50-1 60	0.60-6.00	0.12-0.14	   0 0-2 9	1.0-3.0	.24	.24	   4	   3	   86
Robhote, very beeny	4-10		1.70-1.80		0.05-0.16	1	0.0-1.0	.24	.24	-	3	
i	10-14			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	İ	İ	İ
İ	14-28	6-15	1.65-1.75	0.60-6.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24	İ	į	İ
	28-34	4-12	1.55-1.65	0.60-6.00	0.02-0.10	0.0-2.9	0.0-0.5	.10	.17			
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			ļ
Rosholt	0-8	4-10	  1 50-1 60	0.60-6.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	   4	   3	   86
RODIIO10	8-10		1.70-1.80		0.05-0.16		0.0-1.0	.24	.24	-	3	00
i	10-14	1		0.60-6.00	0.05-0.16	1	0.0-1.0	.24	.24	İ	İ	i
İ	14-28	6-15	1.65-1.75	0.60-6.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24	İ	į	İ
	28-34			0.60-6.00	•			.10	.17			
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
33B:		 				 			 	 	 	1
Chetek	0-10	4-12	1.35-1.70	0.60-2.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	   3	3	86
j	10-16	1		0.60-2.00	1	1	1	.24	'	İ	į	İ
İ	16-20		1.60-1.70		0.02-0.10	0.0-2.9	0.0-0.5	.17	.17			
	20-60	1-3	1.50-1.60	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.10	.15			ļ
33C:						 		1	 	 		1
Chetek	0-10	4-12	  1.35-1.70	0.60-2.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	   3	3	   86
	10-16	1		0.60-2.00	1	1	1	.24	'	į -		
j	16-20	,	1.60-1.70		0.02-0.10			.17	.17	İ	į	İ
	20-60	1 1 2	1.50-1.60	6 00 00	10 00 0 04	0.0-2.9		.10	.15	ı	1	1

Table 24.--Physical Properties of the Soils--Continued

Map symbol	   Depth	Clay	   Moist	Permea-	Available		   Organic	Erosi	on fac	tors	erodi-	Wind  erodi-
and soil name			bulk	bility	water	extensi-	matter			! _	bility	
	<u> </u>	<u>                                     </u>	density		capacity	bility		Kw	Kf	T	group	index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct			 	 	 
38A:	 	 	 			I I	l I		 	 	 	l I
Rosholt	0-8	4-10	1.50-1.60	0.60-6.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	4	3	86
	8-10			0.60-6.00	0.05-0.16	0.0-2.9	0.0-1.0	.24	.24	İ	ĺ	İ
	10-14	5-14	1.70-1.80	0.60-6.00	0.05-0.16	0.0-2.9	0.0-1.0	.24	.24	İ	į	į
	14-28	6-15	1.65-1.75	0.60-6.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24			
	28-34			0.60-6.00	0.02-0.10		0.0-0.5	.10	.17			
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
										ļ		
38B: Rosholt	   0-8	4 10		   0.60-6.00			1.0-3.0	.24	.24	   4	   3	   86
ROSHOIC	0-8   8-10			0.60-6.00	0.12-0.14		0.0-1.0	.24	.24	4± 	3 	86 
	10-14			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	l I	 	 
	14-28			0.60-6.00	0.06-0.19		0.0-0.5	.24	.24	i I	 	 
	28-34			0.60-6.00	0.02-0.10		0.0-0.5	.10	.17	i	! 	
	34-60		1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	i	İ	į
		į			j	İ	į	į	i i	İ	İ	į
38C:												
Rosholt	0-8			0.60-6.00	0.12-0.14		1.0-3.0	.24	.24	4	3	86
	8-10			0.60-6.00	0.05-0.16	1	0.0-1.0	.24	.24			
	10-14			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24			!
	14-28			0.60-6.00	0.06-0.19		0.0-0.5	.24	.24	ļ		
	28-34			0.60-6.00	0.02-0.10		0.0-0.5	.10	.17			
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	 	 	l I
38D:	 	 	 			 			 	l I	 	 
Rosholt	0-8	4-10	1.50-1.60	0.60-6.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	4	3	86
	8-10			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	i -		
	10-14			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	i	İ	i
	14-28	6-15	1.65-1.75	0.60-6.00	0.06-0.19		0.0-0.5	.24	.24	i	İ	İ
	28-34	4-12	1.55-1.65	0.60-6.00	0.02-0.10	0.0-2.9	0.0-0.5	.10	.17	i	İ	į
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	ĺ	ĺ	ĺ
42D:					!			!				!
Amery	0-3			0.60-2.00	0.12-0.14		1.0-3.0	.24	.24	5	3	86
	3-22			0.60-2.00	0.09-0.19		0.0-0.5	.24	.24			
	22-34			0.20-0.60	0.07-0.16		0.0-0.5	.24	.24		 	
	34-41 41-57			0.20-0.60	0.07-0.16		0.0-0.5	.20	.24	 	l I	l I
	57-71			0.20-0.60	0.07-0.16		0.0-0.5	.20	.28	l I	 	 
	71-80		1.80-2.00		0.07-0.15		0.0-0.5	.28	.28	 	 	l I
										İ	İ	İ
43B:	İ	į	İ		j	İ	İ	į	į	İ	į	į
Antigo	0-9	8-15	1.25-1.55	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.37	.37	4	5	56
	9-12	8-15	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-1.0	.43	.43			
	12-19		•	0.60-2.00	•		0.0-0.5	.43	.43			
	19-28			0.60-2.00	•			.43	.43			!
	28-31			0.60-2.00	•				.24	ļ		
	31-33		1.55-1.70  1.55-1.80	0.60-2.00	•			.24	.24			
	33-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	l I	l I	l I
43C:	! 	! 	! 			! 	I I	İ	! 	i	 	İ
Antigo	0-9	8-15	1.25-1.55	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.37	.37	4	   5	56
-	9-12			0.60-2.00	•				.43	i	İ	İ
	12-19			0.60-2.00	•				.43	İ	İ	İ
	19-28			0.60-2.00	•				.43			
	28-31	2-17	1.55-1.70	0.60-2.00	0.05-0.19	0.0-2.9	0.0-0.5	.24	.24			
	31-33	2-17	1.55-1.70	0.60-2.00	0.05-0.19	0.0-2.9	0.0-0.5	.24	.24			
	33-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			

Table 24.--Physical Properties of the Soils--Continued

Map symbol   and soil name	Depth	   Clay 	   Moist     bulk	Permea- bility	  Available   water	   Linear  extensi-	   Organic   matter	Erosi	on fact	tors		Wind  erodi-
and soll hame		 	density	DITICY	capacity	bility	Maccel	Kw	   Kf	   т	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	1		<u> </u>		
İ		ĺ	į į		İ		Ì	İ	İ	İ	İ	İ
43D:												
Antigo	0-9 9-12			0.60-2.00	0.20-0.24		1.0-3.0	.37	.37	4	5	56
	12-19		1.35-1.55   1.55-1.65		0.20-0.22		0.0-1.0	.43	.43	 	 	 
	19-28				0.16-0.22		0.0-0.5	.43	.43			
i	28-31	'		0.60-2.00	0.05-0.19	0.0-2.9	0.0-0.5	.24	.24	İ	i	İ
İ	31-33	2-17	1.55-1.70	0.60-2.00	0.05-0.19	0.0-2.9	0.0-0.5	.24	.24	ĺ	ĺ	Ì
	33-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			ļ
48A:		 										
*6A:   Brill	0-7	   10-20	  1 25-1 45	0.60-2.00	0.20-0.24	   0 0-2 9	2.0-4.0	.37	   .37	   4	   5	   56
	7-11			0.60-2.00	0.16-0.22		0.0-1.0	.43	.43	-		30
i	11-19	10-20	1.40-1.55	0.60-2.00	0.16-0.22	0.0-2.9	0.0-0.5	.43	.43	İ	i	i
İ	19-34	18-27	1.50-1.60	0.60-2.00	0.16-0.22	0.0-2.9	0.0-0.5	.43	.43	ĺ	ĺ	
	34-38			0.60-2.00	•		0.0-0.5	.24	.24			
	38-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
63A:		 	 				 		 	 		
Crystal Lake	0-8	   8-20	  1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.37	.37	   5	   5	56
	8-12	'	1.40-1.60		0.20-0.22		0.0-1.0	.43	.43			i
İ	12-20	15-27	1.40-1.60	0.60-2.00	0.18-0.22	0.0-2.9	0.0-0.5	.43	.43	İ	į	į
	20-32		1.50-1.60		0.18-0.22		0.0-0.5	.43	.43		[	
	32-60	8-20	1.40-1.65	0.20-0.60	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37			ļ
63B:		  -				 			 	 		
Crystal Lake	0-8	   8-20	  1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.37	.37	   5	   5	56
01/2001 1000	8-12				0.20-0.22		0.0-1.0	.43	.43			
i	12-20	15-27	1.40-1.60	0.60-2.00	0.18-0.22	0.0-2.9	0.0-0.5	.43	.43	į	į	į
I	20-32				0.18-0.22		0.0-0.5	.43	.43			
	32-60	8-20	1.40-1.65	0.20-0.60	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37			
63C:		  -				 			 	 		
Crystal Lake	0-8	   8-20	  1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.37	   .37	   5	   5	56
01/2001 1000	8-12		1.40-1.60		0.20-0.22		0.0-1.0	.43	.43			
İ	12-20	15-27	1.40-1.60	0.60-2.00	0.18-0.22	0.0-2.9	0.0-0.5	.43	.43	İ	į	į
I	20-32		1.50-1.60		0.18-0.22		0.0-0.5	.43	.43			
	32-60	8-20	1.40-1.65	0.20-0.60	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37			ļ
63E:		 	 				 		 	 		
Crystal Lake	0-8	   8-20	  1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.37	.37	   5	   5	56
	8-12		1.40-1.60		0.20-0.22		0.0-1.0	.43	.43			i
İ	12-20	15-27	1.40-1.60	0.60-2.00	0.18-0.22	0.0-2.9	0.0-0.5	.43	.43	İ	į	į
	20-32			0.60-2.00	1		0.0-0.5	.43	.43			
	32-60	8-20	1.40-1.65	0.20-0.60	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37			
64A:		 	 				 		 	 		
Totagatic	0-4	   0-0	  0.15-0.45	6.00-20	0.35-0.45		55-85	.02	.02	   5	   8	l <b>0</b>
	4-8		1.40-1.65		0.05-0.15		0.0-0.5	.10		į -		
j	8-17		1.40-1.65		0.05-0.15	0.0-2.9	0.0-0.5	.10	.15			
	17-28		1.40-1.65		0.05-0.10			.10	!			ļ
	28-46		1.40-1.65		0.05-0.10		1	.10	!			
	46-70 70-80		1.40-1.65   1.40-1.65		0.02-0.10			1.10	.15   .15	 	 	I
	70-00	0-10		3.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.10	.15	 	! 	
Winterfield	0-7	0-15	  0.90-1.50	6.00-20	0.09-0.11	0.0-2.9	2.0-4.0	.10	.10	5	2	134
WINCCILLCIA												

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	   Clay	   Moist	Permea-	Available		Organic	Erosi	on fac	tors	erodi-	
and soil name		 	bulk density	bility	water  capacity	extensi- bility	matter	Kw	   Kf	   T	bility  group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	i	i .	i	<u>                                     </u>	i i
İ		ĺ			İ		İ	İ	ĺ	ĺ	ĺ	ĺ
69B:					İ		!	[				
Keweenaw	0-2			2.00-6.00	0.10-0.12		1.0-2.0	.10	.10	5	2	134
	2-4			2.00-6.00	0.09-0.14		0.5-1.0	.17	.24			
	4-16 16-20			2.00-6.00	0.08-0.13		0.0-0.5	1.17	.24		 	
	20-27			0.60-6.00	0.05-0.10		0.0-0.5	1.17	.24		l I	
	27-43			0.60-6.00	0.05-0.10		0.0-0.5	1.17	.24		 	
	43-75			0.60-6.00	0.08-0.13		0.0-0.5	.17	.24	i	! 	i
i	75-80			2.00-6.00	0.05-0.10		0.0-0.5	.17	.17	į	İ	i
İ		ĺ			İ	ĺ	İ	İ	ĺ	ĺ	ĺ	ĺ
Sayner	0-2	2-10	1.25-1.45	2.00-6.00	0.08-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	2-4	0-10	1.35-1.55	2.00-20	0.04-0.11	0.0-2.9	0.5-1.0	1.10	.10			
	4-7		1.35-1.65		0.03-0.11		1.0-2.0	.10	.10			
	7-14		1.35-1.65		0.03-0.11		1.0-2.0	.02	.02			
	14-22		1.45-1.70		0.03-0.11		0.0-0.5	.02	.02			
	22-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	ļ		!
77-1	0.0		1 25 1 4-	6 60 60						-		
Vilas	0-2		1.35-1.65		0.09-0.12		1.0-3.0	.10	1.10	5	2	134
	2-4 4-11		1.35-1.65		0.09-0.11			.10	.10		 	
	11-23		1.50-1.65  1.50-1.70		1		1.0-2.0	.10	1.10		 	
	23-32		1.50-1.70		0.05-0.10		0.0-0.5	.02	.02		 	
	32-80		1.50-1.70		0.05-0.07		0.0-0.5	.02	.02		 	
	32 00	0 3		0.00 20		0.0 2.5	0.0 0.5	.02	.02	i	 	i
69C:		İ			i	İ	i	i	i	i	İ	i
Keweenaw	0-2	2-10	1.35-1.60	2.00-6.00	0.10-0.12	0.0-2.9	1.0-2.0	.10	.10	5	2	134
İ	2-4	2-15	1.45-1.80	2.00-6.00	0.09-0.14	0.0-2.9	0.5-1.0	.17	.24	İ	İ	İ
İ	4-16	2-15	1.55-1.80	2.00-6.00	0.08-0.13	0.0-2.9	0.0-0.5	.17	.24	İ	İ	İ
	16-20	2-10	1.55-1.80	2.00-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.24			
	20-27	2-10	1.55-1.80	0.60-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.24			
I	27-43	2-15	1.55-1.80	0.60-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.24			
	43-75	5-20	1.55-1.80	0.60-6.00	0.08-0.13	0.0-2.9	0.0-0.5	.17	.24			
	75-80	2-10	1.50-1.70	2.00-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
										_		
Sayner	0-2			2.00-6.00	0.08-0.12		1.0-3.0	.10	.10	5	2	134
	2-4		1.35-1.55		0.04-0.11		0.5-1.0	.10	.10			
	4-7		1.35-1.65		0.03-0.11		1.0-2.0	.10	.10			
	7-14 14-22		1.35-1.65 1.45-1.70		0.03-0.11		1.0-2.0	02	.02		 	
	22-60		1.55-1.80		0.03-0.11		0.0-0.5	1.10	1.15		 	 
	22-00	0-3	1.33-1.60	0.00-20	0.01-0.07	0.0-2.9	0.0-0.3	.10	.13		 	 
Vilas	0-2	2-10	1.35-1.65	6.00-20	0.09-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	2-4		1.35-1.65		0.09-0.11		0.5-1.0	.10	.10	i	İ	i
i	4-11	:	1.50-1.65		0.09-0.11	:	1.0-2.0	.10	.10	i	İ	i
İ	11-23	0-10	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.02	.02	İ	İ	İ
	23-32	0-5	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02	ĺ	ĺ	İ
İ	32-80	0-5	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02	ĺ	ĺ	ĺ
69E:								ļ		ļ		
Keweenaw	0-2		•	2.00-6.00	•	•	1.0-2.0	.10	.10	5	2	134
	2-4			2.00-6.00	'			1	.24			
	4-16			2.00-6.00		•		1	.24			
	16-20		•	2.00-6.00	•	•	1					1
	20-27			0.60-6.00				.17	.24		 	
	27-43 43-75			0.60-6.00		•			.24	1	l I	1
	43-75 75-80			0.60-6.00 2.00-6.00		•		17	.24   .17	I I	l I	1
l	13-00		1 20 - 1 - 70	2.00-0.00	10.02-0.10	0.0-2.9	0.0-0.5	/	/	!	!	1

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	Clay	Moist	Permea-	  Available		   Organic	Erosio	on fact	tors	erodi-	Wind  erodi-
and soil name			bulk	bility	water	extensi-	matter		 	_	bility	
			density		capacity	bility		Kw	Kf	T	group	index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct		 	 	 	l I
69E:		 	 				 	İ	 	 		İ
Sayner	0-2	2-10	1.25-1.45	2.00-6.00	0.08-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
j	2-4	0-10	1.35-1.55	2.00-20	0.04-0.11	0.0-2.9	0.5-1.0	.10	.10	ĺ	İ	İ
	4-7	0-10	1.35-1.65	2.00-20	0.03-0.11	0.0-2.9	1.0-2.0	.10	.10			
	7-14		1.35-1.65		0.03-0.11		1.0-2.0	.02	.02			
	14-22		1.45-1.70		0.03-0.11		0.0-0.5	.02	.02			ļ
	22-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	 		
Vilas	0-2	2-10	  1.35-1.65	6.00-20	0.09-0.12	0.0-2.9	1.0-3.0	.10	.10	   5	2	134
İ	2-4	2-10	1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-1.0	.10	.10	İ	i	i
	4-11	2-10	1.50-1.65	6.00-20	0.09-0.11	0.0-2.9	1.0-2.0	.10	.10	İ	į	į
	11-23	0-10	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.02	.02			
	23-32		1.50-1.70		0.05-0.07		0.0-0.5	.02	.02			
	32-80	0-5	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02			
74B:		 	 			 	 		 	 	 	
Vilas	0-2	2-10	1.35-1.65	6.00-20	0.09-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
İ	2-4	2-10	1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-1.0	.10	.10	İ	į	İ
	4-11	2-10	1.50-1.65	6.00-20	0.09-0.11	0.0-2.9	1.0-2.0	.10	.10			
	11-23		1.50-1.70		0.05-0.10		0.0-0.5	.02	.02			
	23-32		1.50-1.70		0.05-0.07		0.0-0.5	.02	.02			ļ
	32-80	0-5	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02	 		
74C:		 							 			
Vilas	0-2	2-10	1.35-1.65	6.00-20	0.09-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	2-4		1.35-1.65		0.09-0.11	0.0-2.9	0.5-1.0	.10	.10			
	4-11		1.50-1.65		0.09-0.11		1.0-2.0	.10	.10			
	11-23		1.50-1.70		0.05-0.10		0.0-0.5	.02	.02	ļ	!	!
	23-32 32-80		1.50-1.70   1.50-1.70		0.05-0.07		0.0-0.5	.02	.02 .02			
	32-80	U-5 	1.50-1.70  	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.UZ 	 	 	 
74D:		! 						İ			<u> </u>	İ
Vilas	0-2	2-10	1.35-1.65	6.00-20	0.09-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	2-4		1.35-1.65		0.09-0.11	0.0-2.9	0.5-1.0	.10	.10			
	4-11		1.50-1.65		0.09-0.11		1.0-2.0	.10	.10			
	11-23		1.50-1.70		0.05-0.10		0.0-0.5	.02	.02			ļ
	23-32 32-80		1.50-1.70   1.50-1.70		0.05-0.07		0.0-0.5	.02	.02 .02			
	32-80	U-5 	1.50-1.70  	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.UZ 	 	 	
100B:					<u> </u>		İ	İ		İ	İ	į
Menahga	0-2	0-8	1.40-1.65	6.00-20	0.06-0.08	0.0-2.9	0.5-2.0	.02	.02	5	1	220
	2-25		1.25-1.60		0.05-0.10		0.0-0.5	.10	.15			
	25-80	0-10	1.50-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
100C:		 					 	l I	 	 	 	
Menahga	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65		65-85	.02	.02	5	1	220
	1-2	0-8	1.40-1.65	6.00-20	0.06-0.08	0.0-2.9	0.5-2.0	.02	.02	İ	į	İ
	2-25		1.25-1.60		0.05-0.10		0.0-0.5	.10	.15			
	25-80	0-10	1.50-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
100D:		 	 		 	 	 		 	 	 	
Menahga	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65		65-85	.02	.02	5	1	220
-	1-2	0-8	1.40-1.65	6.00-20	0.06-0.08	0.0-2.9	0.5-2.0	.02	.02	İ	į	İ
	2-25		1.25-1.60		0.05-0.10	0.0-2.9	0.0-0.5	.10	.15			
	25-80	0 10	1.50-1.65	6 00 00	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15	1	1	1

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	   Clay	   Moist   bulk	Permea- bility	  Available   water	   Linear  extensi-	   Organic   matter	Erosi	on fac	cors	1	Wind  erodi-
and soil name		 	density	Bility	capacity	bility	matter	Kw	   Kf	   T	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	i		i		İ
		ĺ	İ		İ	ĺ	ĺ	İ	ĺ	ĺ	İ	İ
127D:												
Amery	0-3 3-22			0.60-2.00 0.60-2.00	0.12-0.14		1.0-3.0	.24	.24	5	3	86
	22-34			0.20-0.60	0.03-0.13		0.0-0.5	.24	.24	 	 	
j	34-41			0.20-0.60	0.07-0.16		0.0-0.5	.24	.24	İ		
	41-57			0.20-0.60	0.07-0.16		0.0-0.5	.20	.28	ĺ	İ	i
İ	57-71	6-17	1.65-1.90	0.20-0.60	0.07-0.16	0.0-2.9	0.0-0.5	.20	.28	į	į	į
	71-80	4-15	1.80-2.00	0.02-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.28	.28	ļ		
Decil of the	0.4		1 50 1 60									
Rosholt	0-4 4-10			0.60-6.00 0.60-6.00	0.12-0.14		1.0-3.0	.24	.24	4	3	86
	10-14			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	 	l I	 
i	14-28			0.60-6.00	0.06-0.19		0.0-0.5	.24	.24	İ		
	28-34			0.60-6.00	0.02-0.10		0.0-0.5	.10	.17	i	İ	i
İ	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	j	į	į
127E:										_		
Amery	0-3 3-22			0.60-2.00 0.60-2.00	0.12-0.14		1.0-3.0	.24	.24	5	3	86
	22-34			0.80-2.00	0.09-0.19		0.0-0.5	.24	.24	l I	 	 
	34-41			0.20-0.60	0.07-0.16	1	0.0-0.5	.24	.24	 	l I	 
i	41-57			0.20-0.60	0.07-0.16		0.0-0.5	.20	.28	İ		
İ	57-71			0.20-0.60	0.07-0.16		0.0-0.5	.20	.28	İ	İ	i
İ	71-80	4-15	1.80-2.00	0.02-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.28	.28	ĺ	į	į
		[				]		]				[
Rosholt	0-4			0.60-6.00	0.12-0.14		1.0-3.0	.24	.24	4	3	86
	4-10 10-14			0.60-6.00 0.60-6.00	0.05-0.16		0.0-1.0	.24	.24			
	14-28			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	l I	 	 
i	28-34		1.55-1.65		0.02-0.10		0.0-0.5	.10	.17	İ		
	34-60		1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	İ		i
İ		ĺ	İ		İ		İ	İ		ĺ	İ	ĺ
156B:												
Magnor, very stony	0-4			0.60-2.00	0.18-0.24		1.0-3.0	.37	.37	4	8	0
	4-11 11-16			0.60-2.00 0.60-2.00	0.17-0.22		0.0-1.0	.43	.43	l I	 	 
	16-21			0.60-2.00	0.17-0.22		0.0-0.5	.43	.43		 	
	21-39			0.06-0.60	0.08-0.18		0.0-0.5	.28	.28	i	İ	i
İ	39-58	7-17	1.65-1.90	0.06-0.60	0.08-0.18	0.0-2.9	0.0-0.5	.28	.28	j	į	į
	58-60	3-14	1.80-2.00	0.01-0.06	0.00-0.04	0.0-2.9	0.0-0.5	.28	.28			
											-	
Magnor	0-8 8-11				0.18-0.24		1.0-3.0	.37	.37	4	5	56
	11-16		1.55-1.65   1.55-1.65	0.60-2.00	0.17-0.22		1	1	.43	l I	 	 
j	16-21			0.60-2.00				.43	.43	İ		
	21-39			0.06-0.60					.28	ĺ	İ	i
İ	39-58			0.06-0.60	•			.28	.28	j	į	į
	58-60	3-14	1.80-2.00	0.01-0.06	0.00-0.04	0.0-2.9	0.0-0.5	.28	.28			
								ļ				
157B: Freeon, very stony	0-4	   7_17	  1 25_1 55	0.60-2.00	10 19-0 24	0 0-2 9	1.0-3.0	.37		   4	8	   0
rieeon, very scony	4-19			0.60-2.00				.43	.43	=	•	0
	19-39			0.06-0.60				.28	.28	i		i
j	39-53			0.06-0.60	•				.28	İ	İ	İ
	53-80	3-14	1.80-2.00	0.01-0.06	0.08-0.18	0.0-2.9	0.0-0.5	.28	.28			[
<b>T</b>				0.60.6.55							-	
Freeon	0-4			0.60-2.00	•		1.0-3.0	.37	.37	4	5	56
	4-19 19-39			0.60-2.00 0.06-0.60	•			.43	.43	I I	 	1
	39-53			0.06-0.60	•				.28	i		
	53-80			0.01-0.06			0.0-0.5	.28	.28	i		i
		i			i	į	i	ì	İ	i	i	i

Table 24.--Physical Properties of the Soils--Continued

Map symbol	   Depth	   Clay	   Moist	Permea-	Available	   Linear	   Organic	Erosi	on fact	cors		Wind  erodi-
and soil name	Depth		bulk	bility	water	extensi-	matter					bility
		į	density	_	capacity	bility	İ	Kw	Kf	т	group	index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	1	I			
					İ		ļ	-	!	ļ		
157C:	   0-4	   717		0 60 2 00			1.0-3.0	.37	   .37	   4	   8	0
Freeon, very stony	0-4   4-19			0.60-2.00 0.60-2.00			0.1-1.0	.43	1	4± 	8	0
	19-39			0.06-0.60			0.0-0.5	.28	.28	 	 	i
	39-53	!		0.06-0.60	1		0.0-0.5	.28	.28	i	<u> </u>	i
	53-80	3-14	1.80-2.00	0.01-0.06	0.08-0.18	0.0-2.9	0.0-0.5	.28	.28	i	į	į
Freeon	0-4			0.60-2.00			1.0-3.0	.37	.37	4	5	56
	4-19			0.60-2.00	'		0.1-1.0	.43	.43			ļ
	19-39			0.06-0.60	'			.28	.28			
	39-53 53-80			0.06-0.60 0.01-0.06	0.08-0.18		0.0-0.5	.28	.28 .28	 	 	
	33-80	3-14	1.80-2.00	0.01-0.00		0.0-2.9	0.0-0.5	.20	.20	 	 	i i
160A:		İ			i		İ	i	i	İ		İ
Oesterle	0-7	8-15	1.40-1.70	0.60-6.00	0.12-0.14	0.0-2.9	2.0-3.0	.20	.20	4	3	86
	7-11	8-15	1.40-1.70	0.60-6.00	0.10-0.19	0.0-2.9	0.5-1.0	.24	.24			
	11-31	1		0.60-6.00	1		1	.24	1			
	31-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
182B:		 	 			 	 			 		
Padus	0-2	   3-15	  1.35-1.70	0.60-2.00	0.10-0.18	0.0-2.9	1.0-3.0	.24	.24	   4	3	86
- 4442	2-3	1		0.60-2.00	1		0.5-1.0		1	i -		
	3-19			0.60-2.00					1	İ	i	i
	19-26	5-15	1.40-1.70	0.60-2.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24	į	į	į
	26-38	7-17	1.40-1.70	0.60-2.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24			
	38-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			!
182C: Padus	   0-2	215	  1 25 1 70	0.60-2.00			1 1 0 3 0	24	.24	   4	   3	   86
Padus	2-3	1		0.60-2.00	1		0.5-1.0		1	<del>"</del>	3 	00
	3-19			0.60-2.00	'		1		1	İ		i
	19-26			0.60-2.00	'		0.0-0.5	.24		İ	i	i
	26-38	7-17	1.40-1.70	0.60-2.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24	į	į	į
	38-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
192A: Worcester	   0-2	215		0.60-2.00			1020	.24	   .24	   4	   3	   86
worcester	0-2			0.60-2.00	'			.24	1	4± 	3	86
	3-6			0.60-2.00	'				1	 	 	i
	6-16			0.60-2.00	'		0.0-2.0	.24		i	i	i
	16-20			0.60-2.00	'		0.0-0.5	.24		i	i	i
	20-32	8-18	1.40-1.70	0.60-2.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24	ĺ	İ	İ
	32-39	3-8	1.45-1.70	6.00-20	0.02-0.11	0.0-2.9	0.0-0.5	.10	.17			
	39-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			ļ
193A:		 				  -						
Minocqua	   0-4	   0-0	  0 15-0 45	2.00-6.00	0 35-0 45	 	30-60	02	.02	   4	   8	1 0
mmooquu	4-15	1		0.60-2.00	1				37	-	0	
	15-28			0.60-2.00						İ	i	i
	28-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	İ	İ	İ
		!					[	1			[	
215B:				0 00 5 05								
Pence	0-3			2.00-6.00 0.60-6.00						3	3	86
	3-8   8-15			0.60-6.00	1				1	l I	I I	I I
	8-15		1.35-1.45   1.65-1.75		0.10-0.15					I I	 	
	21-60	1	1.55-1.80		0.01-0.07				1	i		İ
	i	i	i	-	i	İ	i	i	i	i	i	i

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	   Clay 	   Moist   bulk	Permea- bility	Available water	   Linear  extensi-	   Organic   matter	Erosi	on fac	tors		Wind  erodi-
and soll lidile			density	DITTLY	capacity	bility	macter	Kw	Kf	T	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	i i	<u>.                                      </u>	i i	<u> </u>	
		ļ				ļ	ļ	ļ			ļ	
215C:	0-3	215		2 00 6 00	0.11-0.15		1.0-3.0	.24	   .24	   3	   3	   86
Pence	3-8		1.30-1.70   1.35-1.65	2.00-6.00 0.60-6.00	0.11-0.15		0.5-1.0	.24	.24	3	3 	86
	8-15	!		0.60-6.00	0.10-0.15		1.0-2.0	.17	.24			
i	15-21		1.65-1.75		0.05-0.08	0.0-2.9	0.0-0.5	.05	.10	į	į	İ
	21-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15		[	
01ED.												
215D:     Pence	0-3	   3-15	  1.30-1.70	2.00-6.00	0.11-0.15	0.0-2.9	1.0-3.0	.24	.24	3	   3	86
1 000	3-8	!		0.60-6.00	0.11-0.18		0.5-1.0	.24	.24			
i	8-15			0.60-6.00	0.10-0.15	0.0-2.9	1.0-2.0	.17	.24	į	į	İ
I	15-21	0-6	1.65-1.75	2.00-60	0.05-0.08	0.0-2.9	0.0-0.5	.05	.10			
	21-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
315A:		 	 			l I	 	l I			 	l I
Rib	0-7	10-20	1.25-1.35	0.60-2.00	0.22-0.28	0.0-2.9	3.0-10	.32	.32	4	   5	56
	7-10			0.60-2.00	0.18-0.22		0.0-1.0	.43	.43	į	į	İ
İ	10-32	18-30	1.45-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.5-1.0	.43	.43	ĺ	ĺ	
	32-35	!		0.60-2.00	0.10-0.19	1	0.0-0.5	.32	.32			
	35-37		1.65-1.75		0.05-0.08		0.0-0.5	.10	.15			
	37-60	0-5 	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15		 	l I
337A:					i					i		
Plover	0-10	3-8	1.35-1.65	0.60-2.00	0.13-0.18	0.0-2.9	2.0-3.0	.28	.28	5	3	86
I	10-13	5-15	1.40-1.70	0.60-2.00	0.15-0.19	0.0-2.9	0.5-1.0	.24	.24			
	13-18			0.60-2.00	0.15-0.19		0.5-1.0	.24	.24			
	18-32 32-60	!	1.50-1.70   1.50-1.70	0.60-2.00 0.20-0.60	0.12-0.17		0.5-1.0	.24	.24			
	32-60	5-12	1.50-1.70  	0.20-0.60	0.11-0.22	0.0-2.9	0.0-0.5	.24	•24 		 	l l
368B:					i		İ	ì	<u> </u>	i	! 	İ
Mahtomedi	0-5	2-15	1.40-1.60	6.00-20	0.09-0.11	0.0-2.9	0.5-1.0	.10	.10	5	2	134
	5-8		1.40-1.50		0.02-0.07		0.0-0.5	.10	.10		[	
	8-15	!	1.45-1.75		0.02-0.07		0.0-0.5	.05	.10			
	15-30 30-60		1.45-1.75   1.45-1.75		0.02-0.07		0.0-0.5	.05	.10		 	l I
	30-00	0-10	1.43-1.73	0.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10		 	l I
Cress	0-3	5-18	1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	3	3	86
İ	3-15	5-18	1.40-1.70	0.60-2.00	0.12-0.17	0.0-2.9	0.5-1.0	.24	.24	į	į	į
	15-31		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17			
	31-36		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17			
	36-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15		 	l I
368C:					i		İ	ì	<u> </u>	i	! 	İ
Mahtomedi	0-5	2-15	1.40-1.60	6.00-20	0.09-0.11	0.0-2.9	0.5-1.0	.10	.10	5	2	134
I	5-8	1	1.40-1.50		0.02-0.07		0.0-0.5	.10	.10			
	8-15		1.45-1.75		0.02-0.07		0.0-0.5	.05	.10			
	15-30 30-60		1.45-1.75   1.45-1.75		0.02-0.07		0.0-0.5	.05	.10		 	
	30-60	0-10	1.45-1.75	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10		 	l l
Cress	0-3	5-18	1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	3	3	86
İ	3-15	5-18	1.40-1.70	0.60-2.00	0.12-0.17	0.0-2.9	0.5-1.0	.24	.24	į	į	į
	15-31		1.50-1.80		0.02-0.10			.17	.17		[	
	31-36		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17			
	36-60	   T-0	1.55-1.80	6.00-20	0.01-0.07	U.U-2.9 	0.0-0.5	.10	.15	 	[ [	l I
368D:		! 	 			! 	! 				! 	
Mahtomedi	0-5	2-15	1.40-1.60	6.00-20	0.09-0.11	0.0-2.9	0.5-1.0	.10	.10	5	2	134
j	5-8		1.40-1.50		0.02-0.07			.10	.10	İ	İ	İ
İ	8-15		1.45-1.75		0.02-0.07		0.0-0.5	.05	.10		[	
	15-30		1.45-1.75		0.02-0.07		1	.05	.10			
	30-60	0-10	1.45-1.75	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10	1		1

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	   Clay	Moist	Permea-	Available	1	Organic	Erosi	on fac	tors	erodi-	Wind  erodi
and soil name		 	bulk density	bility	water  capacity	extensi- bility	matter	   Kw	   Kf	   T	bility  group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct			-		
2600												
368D: Cress	0-3	   5-18	  1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	   3	3	86
	3-15		1.40-1.70		0.12-0.17		0.5-1.0	.24	.24			
i	15-31		1.50-1.80		0.02-0.10	1	0.0-0.5	.17	.17	i	İ	i
į	31-36	0-8	1.50-1.80	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.17	.17	ĺ	į	İ
	36-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			[
371A:		 	 			 				 		
Croswell	0-1	2-10	1.35-1.65	6.00-20	0.06-0.11	0.0-2.9	1.0-3.0	.10	.10	5	2	134
I	1-7	0-10	1.30-1.50	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.10	.10			
I	7-16		1.40-1.60		0.06-0.11	1	0.6-1.0	.10	.10			
	16-39		1.40-1.60		0.05-0.10	1	0.0-0.5	.02	.02	ļ		!
	39-60	0-5 	1.50-1.65	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02	 		
380B:		! 										
Cress	0-3	5-18	1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	3	3	86
I	3-15	5-18	1.40-1.70	0.60-2.00	0.12-0.17	0.0-2.9	0.5-1.0	.24	.24			
	15-31		1.50-1.80		0.02-0.10	1	0.0-0.5	.17	.17			
	31-36		1.50-1.80		0.02-0.10	1	0.0-0.5	.17	.17	ļ		
	36-60	1-6 	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	 		
Rosholt	0 - 8	4-10	1.50-1.60	0.60-6.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	4	3	86
I	8-10	3-12	1.70-1.80	0.60-6.00	0.05-0.16	0.0-2.9	0.0-1.0	.24	.24			
I	10-14			0.60-6.00	0.05-0.16	1	0.0-1.0	.24	,			
	14-28		1.65-1.75		0.06-0.19	1	0.0-0.5	.24	.24	ļ		!
	28-34		1.55-1.65		0.02-0.10	1	0.0-0.5	.10	.17			
	34-60	1-6 	1.55-1.80  	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	1.10	.15	 	 	1
380C:		 									İ	İ
Cress	0-3	5-18	1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	3	3	86
ļ	3-15		1.40-1.70		0.12-0.17	1	0.5-1.0	.24	.24			
	15-31		1.50-1.80		0.02-0.10	1	0.0-0.5	.17	.17	ļ		!
ļ	31-36 36-60		1.50-1.80   1.55-1.80		0.02-0.10	1	0.0-0.5	1.17	17	 	1	1
i		- 0							123	ĺ	İ	İ
Rosholt	0 - 8	4-10	1.50-1.60	0.60-6.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	4	3	86
I	8-10		1.70-1.80		0.05-0.16	0.0-2.9	0.0-1.0	.24	.24			
	10-14			0.60-6.00	0.05-0.16	1	0.0-1.0	.24	,			
	14-28	'	1.65-1.75		0.06-0.19	1	0.0-0.5	.24	.24	ļ		
ļ	28-34 34-60		1.55-1.65   1.55-1.80		0.02-0.10	1	0.0-0.5	1.10	17	 	1	1
	31 00	10		0.00 20				.10	.13			i
380D:						!					!	[
Cress	0-3	'		0.60-2.00			0.5-2.0	.24		3	3	86
ļ	3-15 15-31	•	1.40-1.70   1.50-1.80	0.60-2.00	0.12-0.17		0.5-1.0	.24	.24			
	31-36		1.50-1.80   1.50-1.80		0.02-0.10		1	.17	1.17			1
ļ	36-60	'	1.55-1.80		0.01-0.07	1	0.0-0.5	1.10	.15			
į		İ	į į		İ	İ	İ	İ	į	İ	İ	į
Rosholt	0 - 8	'			0.12-0.14		1.0-3.0	.24	'	4	3	86
	8-10	'		0.60-6.00				.24	'	ļ		!
l l	10-14 14-28	'		0.60-6.00				.24	'			1
ļ	14-28 28-34	'		0.60-6.00 0.60-6.00				1.24	.24	l	 	I
	34-60	'	1.55-1.80		0.02-0.10			.10	'			
į			ļ			ļ	!			ļ	ļ	ļ
383B:   Mahtomedi	0-5	215	  1.40-1.60	6 00 20	0.09-0.11		0.5-1.0		   .10	   5	2	134
*************************	0-5 5-8	'	1.40-1.60   1.40-1.50		0.09-0.11		1	1.10	1.10	3	4	1 134
i I	8-15	'	11.45-1.75		0.02-0.07			.05	'	i		İ
i	15-30	'	1.45-1.75		0.02-0.07			.05	1.10	i	İ	i
	30-60	'	1.45-1.75		0.02-0.07		0.0-0.5	.05	'	1	1	1

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	   Clay	   Moist	Permea-	  Available	   Linear	   Organic	Erosi	on fac	tors	,	Wind  erodi-
and soil name	 		bulk density	bility	water  capacity	extensi-	matter	   Kw	   Kf	   m	bility	bility
	   In	Pct	g/cc	   In/hr	In/in	Pct	Pct	KW		-	group 	Index
		İ				į	İ			ĺ	İ	İ
383C: Mahtomedi	   0-5	2-15	1.40-1.60	   6 00-20	0.09-0.11	0.0-2.9	0.5-1.0	1.10	   .10	   5	   2	   134
Mancomear	5-8	1	1.40-1.50		0.02-0.07		0.0-0.5	1.10	1.10		-	131
	8-15		1.45-1.75		0.02-0.07		0.0-0.5	.05	.10	i	İ	i
	15-30	0-10	1.45-1.75	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10	į	į	į
	30-60	0-10	1.45-1.75	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10			!
383D:	 					 						
Mahtomedi	0-5	2-15	1.40-1.60	6.00-20	0.09-0.11	0.0-2.9	0.5-1.0	.10	.10	5	2	134
	5-8	0-10	1.40-1.50	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.10	į	į	į
	8-15	0-10	1.45-1.75	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10			
	15-30		1.45-1.75		0.02-0.07		0.0-0.5	.05	.10			
	30-60	0-10	1.45-1.75	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10			
396B:	 		 			! 						 
Friendship	0-4	2-6	1.50-1.65	6.00-20	0.06-0.08	0.0-2.9	0.5-2.0	.02	.02	5	1	220
	4-29	2-7	1.35-1.65	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	į	į	į
	29-60	0-4	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	ļ		
Wurtsmith	   0-6	0.10	  1.30-1.65	6 00 20	0.07-0.09		1.0-6.0	.02	.02	   5	   1	   220
wur csmich	6-33	1	1.40-1.60		0.06-0.07		0.0-0.5	1.15	.15	]	-	220
	33-60	1	1.50-1.65		0.05-0.07		0.0-0.5	1.15	.15	i		
	j	į	İ	İ		į	İ	i	į	į	į	į
Grayling	0-3	1	1.30-1.65		0.07-0.09		1.0-6.0	.02	.02	5	1	220
	3-15		1.30-1.65		0.05-0.07		0.3-0.5	.15	.15			
	15-23		1.45-1.65		0.02-0.07		0.0-0.5	.15	.15			
	23-60	0-10	1.45-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.15	.15			 
397A:	 											
Perchlake	0-9	2-10	1.40-1.50	6.00-20	0.10-0.12	0.0-2.9	0.5-2.0	.10	.10	5	2	134
	9-18	2-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	ĺ	İ	ĺ
	18-42	1	1.40-1.65		0.05-0.10		0.0-0.5	.15	.15			
	42-46		1.50-1.70		0.11-0.19		0.0-0.5	.24	.24			
	46-60 	2-8 	1.50-1.65	6.00-20	0.05-0.09	0.0-2.9	0.0-0.5	.15	.15		 	 
399B:	! 					İ		i	İ	i		İ
Grayling	0-3	0-10	1.30-1.65	6.00-20	0.07-0.09	0.0-2.9	1.0-6.0	.02	.02	5	1	220
	3-15	0-10	1.30-1.65	6.00-20	0.05-0.07	0.0-2.9	0.3-0.5	.15	.15			
	15-23		1.45-1.65		0.02-0.07		0.0-0.5	.15	.15			
	23-60	0-10	1.45-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.15	.15			
399C:	 											
Grayling	0-3	0-10	1.30-1.65	6.00-20	0.07-0.09	0.0-2.9	1.0-6.0	.02	.02	5	1	220
	3-15	0-10	1.30-1.65	6.00-20	0.05-0.07	0.0-2.9	0.3-0.5	.15	.15			
	15-23	1	1.45-1.65		0.02-0.07		0.0-0.5	.15	.15			
	23-60	0-10	1.45-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.15	.15			
399D:	 					 						 
Grayling	0-3	0-10	1.30-1.65	6.00-20	0.07-0.09	0.0-2.9	1.0-6.0	.02	.02	5	1	220
	3-15	0-10	1.30-1.65	6.00-20	0.05-0.07	0.0-2.9	0.3-0.5	.15	.15	į	į	į
	15-23		1.45-1.65		0.02-0.07	0.0-2.9	0.0-0.5	1.15	.15			
	23-60	0-10	1.45-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.15	.15			
405A:	 		 			 			 			 
Lupton	0-65	0-0	0.10-0.35	0.20-6.00	0.35-0.45		70-90	.02	.02	3	8	0
-	ĺ	į	İ	İ		į	İ	İ	İ	į	İ	İ
Cathro	0-28	1		0.20-6.00	1		60-85	.02	.02	2	8	0
	28-49			0.20-2.00	'		0.0-0.5	.28	.28			
	49-60 	TO-30	1.50-1.70	0.20-2.00	0.11-0.22	U.U-2.9 	0.0-0.5	.28	.28	 	 	I I
Tawas	0-31	0-0	0.15-0.40	0.20-6.00	0.35-0.45		30-80	.02	.02	2	8	0
	31-60	,	1.55-1.80		0.02-0.10		0.0-0.5	.15	.15	İ	İ	İ
										İ	İ	İ

Table 24.--Physical Properties of the Soils--Continued

Map symbol   and soil name	Depth	   Clay 	   Moist     bulk	Permea- bility	  Available   water	   Linear  extensi-	   Organic   matter	 	on fac		wind  erodi-  bility	
			density		capacity	bility		Kw	Kf	Т	group	index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct				[	
106A:		 				 			 			
Loxley	0-13	   0-0	  0.30-0.40	6.00-20	0.45-0.55	 	70-90	.02	.02	   3	   8	l 0
	13-60	1			0.35-0.45		70-90	.02	.02	İ		
į		j	i i		İ	į	į	į	į	İ	į	j
07A:					İ	<u> </u>	!		ļ		[	
Seelyeville	0-80	0-0	0.10-0.25	0.20-6.00	0.35-0.45		25-99	.02	.02	3	8	0
  Markev	0-32	   0-0	  0 15-0 45	0.20-6.00	0 35-0 45	 	55-85	.02	   .02	   2	   8	   0
	32-60	1	1.40-1.65		0.03-0.10	1	0.0-0.5	.10	.15	i -		
į		İ	į į		İ	İ	Ì	į	j	ĺ	į	j
10A:					İ	<u> </u>	!		ļ		[	
Seelyeville	0-80	0-0	0.10-0.25	0.20-6.00	0.35-0.45		25-99	.02	.02	3	8	0
   Cathro	0-28	   0-0	  0 28-0 45	0.20-6.00	0.35-0.45	 	   60-85	.02	   .02	   2	   8	   0
	28-49	!			0.11-0.22	1	0.0-0.5	.28	.28	. <i>-</i>		
i	49-60	10-30	1.50-1.70	0.20-2.00	0.11-0.22	0.0-2.9	0.0-0.5	.28	.28	i	į	j
İ		ļ	ļ İ		ļ	!	ļ				ļ	
12A: Rifle										_	_	
Rifle	0-4 4-60	1			0.55-0.65	1	70-90 70-90	.02	.02	5	7	38
	1-00	0-0		2.00-0.00		 	70-30	.02	.02		 	 
Tacoosh	0-8	0-0	0.10-0.30	0.20-6.00	0.35-0.45		75-99	.02	.02	2	8	0
	8-40	0 - 0	0.10-0.20	0.60-6.00	0.45-0.55		75-99	.02	.02			
	40-42	1			0.11-0.19		0.5-1.0	.24	.24			
	42-60	10-18	1.50-1.70	0.60-2.00	0.11-0.19	0.0-2.9	0.5-1.0	.24	.24			
15A:		 	 			 	 	l I	 	l I	 	
Greenwood	0-60	0-0	  0.10-0.35	0.20-6.00	0.35-0.45		70-90	.02	.02	   3	8	0
j		j	j j		İ	İ	Ì	İ	İ	ĺ	į	İ
39B:												
Graycalm	0-3	!	1.30-1.55		0.09-0.11		0.5-2.0	1.10	.10	5	2	134
	3-22 22-35	!	1.25-1.60   1.50-1.65		0.05-0.10		0.0-0.5	1.10	.15   .15	l I	 	
	35-60	!	1.50-1.65		0.05-0.10		0.0-0.5	.10	.15	i	! 	İ
İ		İ	į į		İ	İ	Ì	į	j	ĺ	į	j
Menahga	0-1	!	0.15-0.30		0.55-0.65		65-85	.02	.02	5	2	134
	1-2	!	1.30-1.55		0.09-0.11		0.5-2.0	1.10	.10			
	2-25 25-80		1.25-1.60   1.50-1.65		0.05-0.10	1	0.0-0.5	.10	.15   .15	l I	 	
	25 00	0 10	1.50 1.05	0.00 20		0.0 2.5		.10	.13	i		
39C:		İ	j j		j	İ	į	i	į	i	į	j
Graycalm	0-3	1	1.30-1.55		0.09-0.11	1	0.5-2.0	.10	.10	5	2	134
	3-22	!	1.25-1.60		0.05-0.10	1	0.0-0.5	1.10	.15			
	22-35 35-60		1.50-1.65   1.50-1.65		0.05-0.10		0.0-0.5	1.10	.15   .15		 	l I
	33-00	0-15	1.30-1.05	0.00-20		0.0-2.5	0.0-0.5	.10	.13		 	 
Menahga	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65		65-85	.02	.02	5	2	134
	1-2		1.30-1.55		0.09-0.11		0.5-2.0	.10	.10			
	2-25		1.25-1.60		0.05-0.10		0.0-0.5	.10	.15			
	25-80	0-10	1.50-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
39D:		 	 			 	 	l I	 	l I	 	
Graycalm	0-3	2-10	  1.30-1.55	6.00-20	0.09-0.11	0.0-2.9	0.5-2.0	.10	.10	5	2	134
j	3-22		1.25-1.60		0.05-0.10	0.0-2.9	0.0-0.5	.10	.15			
	22-35		1.50-1.65		0.05-0.10		0.0-0.5	.10	.15			
	35-60	0-15	1.50-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.15			
  Menahqa	0-1	   0-0	  0.15-0.30	6.00-20	0.55-0.65	 	65-85	.02	.02	   5	   2	134
	1-2		1.30-1.55		0.09-0.11		0.5-2.0	1.10	.10	ĺ	 i	
i	2-25		1.25-1.60		0.05-0.10		0.0-0.5	.10	.15	İ	į	į
			1.50-1.65			0.0-2.9	0.0-0.5	.10	.15			

Table 24.--Physical Properties of the Soils--Continued

Map symbol   and soil name	Depth	   Clay	   Moist   bulk	Permea- bility	  Available   water	   Linear  extensi-	   Organic   matter	Erosi	on fac	cors	Wind  erodi-  bility	
and soil name			density	   prrrch	capacity	bility	marter	Kw	   Kf	T	group	
<u> </u>	In	Pct	g/cc	In/hr	In/in	Pct	Pct			<u></u>		
İ		İ			İ		ĺ	ĺ	ĺ		ĺ	
141C:	0.4											
Freeon	0-4 4-19	1	1	0.60-2.00	1		1.0-3.0	.37	.37 .43	4	8	0
	19-39	1	1		0.18-0.22		0.0-0.5	.28	.28	l I	 	
	39-53	1	1	0.06-0.60	1		0.0-0.5	.28	.28	 	 	l I
	53-80	1	1		0.08-0.18		0.0-0.5	.28	.28		İ	İ
Cathro	0-28	1	1	0.20-6.00	1		60-85	.28	   .28	2	2	134
	28-49 49-60	1	1	0.20-2.00	0.11-0.22		0.0-0.5	.28	.28	 	 	 
142C:												
Haugen	0-4	1	1	0.60-2.00	1		1.0-3.0	.24	.24	5	3	86
	4-15 15-23	1	1	0.60-2.00	0.08-0.19		0.5-1.0	.24	.24	 		
	23-35	1		0.60-2.00	1		0.0-0.5	.24	.24	l I	 	l I
l	35-49	1		0.20-0.60	1		0.0-0.5	.24	.24	 	 	 
	49-79	1	1		0.05-0.13		0.0-0.5	.24	.24	İ		i
į	79-80	1	1	0.01-0.06	1		0.0-0.5	.24	.24	İ	İ	İ
Greenwood	0-6 6-60		0.30-0.40		0.55-0.65		55-75 55-75	.02	.02	3	7	38
	6-60	0-0	0.10-0.25	0.60-6.00	0.45-0.55	 	55-75	.02	.02	l I	 	
143D:							İ	İ		İ		
Amery	0-3	1		0.60-2.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	5	3	86
	3-22	1			0.09-0.19		0.0-0.5	.24	.24			
	22-34	1	1	0.20-0.60	1		0.0-0.5	.24	.24			
	34-41	1	1		0.07-0.16		0.0-0.5	.24	.24			
	41-57 57-71	1	1	0.20-0.60	0.07-0.16		0.0-0.5	.20	.28 .28	 		
l	71-80		1		0.07-0.16		0.0-0.5	.28	.28	 	 	 
							İ	İ		İ	İ	İ
Greenwood	0 - 6	0 - 0	0.30-0.40	6.00-20	0.55-0.65		55-75	.02	.02	3	7	38
	6-60	0-0	0.10-0.25	0.60-6.00	0.45-0.55		55-75	.02	.02			
461A:		 	 			 	l I	1	 	 	 	 
Bowstring	0-38	0-0	0.10-0.35	0.20-6.00	0.35-0.45		70-90	.02	.02	3	8	0
	38-47	0-10	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.15	i	į	İ
į	47-80	0-0	0.10-0.35	0.20-6.00	0.35-0.45		70-90	.02	.02	İ	į	į
484A:			 			  -		l i	 			l I
Greenwood	0-6	0-0	0.30-0.40	   6.00-20	0.55-0.65	 	55-75	.02	.02	   3	   7	38
	6-60	1	1	0.60-6.00	1		55-75	.02	'			
							ļ				[	
Beseman	0-36	1		0.60-6.00			25-75		.02	2	8	0
	36-60	8-20	1.35-1.60	0.20-0.60	0.09-0.22	0.0-2.9 	0.5-1.0	.43	.43	l I	 	l I
195B:							İ	İ		İ		
Karlsborg	0 - 9	6-8	1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-2.0	.10	.10	4	2	134
İ	9-28	0-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9			.15			
	28-48	,			0.08-0.10	6.0-8.9	0.0-0.5	.28	.28			
	48-80	1-5	1.55-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
   Grettum	0-3	2-12	  1.35-1.60	   6.00-20	0.09-0.11	0.0-2.9	1.0-3.0	1.10	   .10	   5	   2	134
	3-32		1.40-1.65		0.05-0.11				.15	i	, -	
I I		1	1		'	0.0-2.9		.15	.15	i	1	1
1	32-75	2-12	1.40-1.65	2.00-20	0.05-0.10	0.0-2.9	0.0-0.5	. TO				

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	   Clay	   Moist   bulk	Permea- bility	  Available   water	   Linear  extensi-	   Organic   matter	Erosi	on fac	tors	,	Wind  erodi-
and soll name		 	density	DITICY	capacity		Maccer	Kw	   Kf	   T	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	İ		<u> </u>		
4055												ļ
495B: Perida	0-9	   6-8	  1.35-1.65	6 00-20	0.09-0.11	   n n_2 q	0.5-2.0	1.10	1.10	   4	2	134
rerida	9-43		1.45-1.65		0.05-0.10		0.0-0.5	1.15	1.15	<del>*</del> 	4	134
	43-45		1.45-1.65		0.05-0.10		0.0-0.5	.15	1	İ		İ
İ	45-60	50-80	1.45-1.70	0.01-0.06	0.08-0.10	6.0-8.9	0.0-0.5	.28	.28	į	į	į
	60-74			0.01-0.06	1		0.0-0.5	.28	.28			
	74-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
495C:		 	 		 	 				 		
Karlsborg	0 - 9	6-8	1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-2.0	.10	.10	4	2	134
j	9-28	0-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	ĺ	İ	İ
	28-48			0.01-0.20	•		0.0-0.5	.28	.28			
	48-80	1-5	1.55-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
Grettum	0-3	   2-12	  1.35-1.60	6.00-20	0.09-0.11	0.0-2.9	1.0-3.0	.10	1 .10	   5	2	134
i	3-32		1.40-1.65		0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	İ	İ	i
İ	32-75	2-12	1.40-1.65	2.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	İ	į	į
	75-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			ļ
Perida	0-9	   6-8	  1.35-1.65	6 00-20	0.09-0.11	   0 0-2 9	0.5-2.0	1.10	   .10	   4	   2	134
101100	9-43		1.45-1.65		0.05-0.10		0.0-0.5	.15	.15	i -	-	
	43-45	'	1.45-1.65		0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	İ	İ	i
	45-60	50-80	1.45-1.70	0.01-0.06	0.08-0.10	6.0-8.9	0.0-0.5	.28	.28	į	İ	į
	60-74	50-80	1.45-1.70	0.01-0.06	0.08-0.10	6.0-8.9	0.0-0.5	.28	.28			
	74-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
495D:		 	 			 				 		
Karlsborg	0 - 9	6-8	1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-2.0	.10	.10	4	2	134
	9-28		1.45-1.65		0.05-0.10		0.0-0.5	.15	.15			
	28-48			0.01-0.20	•	•	0.0-0.5	.28	.28	!		!
	48-80	1-5 	1.55-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	 		
Grettum	0-3	2-12	  1.35-1.60	6.00-20	0.09-0.11	0.0-2.9	1.0-3.0	.10	.10	   5	2	134
	3-32	2-12	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	į	İ	į
	32-75	2-12	1.40-1.65	2.00-20	0.05-0.10		0.0-0.5	.15	.15			
	75-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
Perida	0-9	   6-8	  1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-2.0	1.10	   .10	   4	2	134
	9-43		1.45-1.65		0.05-0.10		0.0-0.5	.15	.15	i -	i -	
	43-45	2-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	į	İ	į
	45-60	50-80	1.45-1.70	0.01-0.06	0.08-0.10	6.0-8.9	0.0-0.5	.28	.28			
	60-74				0.08-0.10		0.0-0.5	.28	.28			
	74-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	 		
497A:		 				 				 		
Meenon	0 - 9	6-8	1.35-1.65	2.00-20	0.09-0.11	0.0-2.9	0.5-2.0	.10	.10	4	1	250
	9-28	1-7	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
	28-41	'		0.01-0.06	•			.28				
	41-80	1-7	1.55-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	 		
515A:			 			! 						
Manitowish	0 - 3	3-15	1.30-1.70	2.00-6.00	0.11-0.15	0.0-2.9	1.0-3.0	.24	.24	3	3	86
	3 - 4			0.60-6.00	1		1	.24	1			
	4-16			0.60-6.00	1		1	.24	1			ļ
	16-19		1.45-1.65		0.04-0.12		1	.15	!			
	19-60	0-5	1.55-1.80	0.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	   Clay	   Moist	Permea-	Available		Organic	Erosi	on fac	tors	erodi-	
and soil name		 	bulk density	bility	water  capacity	extensi- bility	matter	Kw	   Kf	   T	bility  group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	i i	İ	i i		Ī
i		İ	]		į ,		ĺ	i	i	ĺ	İ	İ
521A:		į			j	İ	İ	į	į	j	į	j
Dody	0-3	0 - 0	0.45-0.85	2.00-6.00	0.35-0.45		20-50	.02	.02	4	8	0
I	3 - 9	1-12	1.35-1.60	2.00-6.00	0.06-0.08	0.0-2.9	0.2-1.0	.02	.02			
I	9-20			2.00-6.00	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
	20-23			2.00-6.00	0.05-0.10		0.0-0.5	1.15	.15			
	23-47			0.01-0.20	0.08-0.12		0.0-0.5	.28	.28			
	47-58	1	1.40-1.65		0.05-0.10		0.0-0.5	.15	.15	ļ		
	58-80	0-12	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	ļ		ļ
524E:								1				
Rock outcrop.												
Frogcreek	0-4			0.60-2.00			2.0-4.0	.37	   .37	   5	   5	   56
rrogcreek	4-13		1.45-1.65		0.20-0.22		1.0-2.0	37	37	5	5	56
ļ	13-19				0.20-0.22		0.0-0.5	.20	.28		 	
	19-32			0.20-0.60	0.07-0.20		0.0-0.5	.20	.28		 	 
ļ	32-46				0.07-0.19		0.0-0.5	.20	.28	l I	 	1
ļ.	46-80			0.06-0.20	0.02-0.05		0.0-0.5	1.10	1.17	i i	 	
ļ	10-00	2-10		3.00-0.20			0.0-0.5	.10	,	i	! 	İ
Metonga	0-3	5-12	1.35-1.45	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	2	3	86
	3-4			0.60-2.00	0.17-0.22		0.5-1.0	.37	.37	i -		
i	4-25		1.40-1.70		0.17-0.22		0.0-0.5	.37	.37	i		i
i	25-28			0.60-2.00	0.07-0.16		0.0-0.5	.24	.24	i	İ	İ
i	28-80	0-0		0.01-20	0.00-0.00	i	i	i		İ	İ	i
į		į	İ		i	İ	İ	į	İ	İ	İ	İ
542B:		İ			İ		ĺ	İ	ĺ	ĺ	İ	ĺ
Haugen, very stony	0 - 4	6-14	1.40-1.65	0.60-2.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	5	3	86
I	4-15	4-14	1.40-1.70	0.60-2.00	0.08-0.19	0.0-2.9	0.5-1.0	.24	.24			
I	15-23	4-14	1.40-1.70	0.60-2.00	0.08-0.19	0.0-2.9	0.5-1.0	.24	.24			
I	23-35			0.60-2.00	0.05-0.16	0.0-2.9	0.0-0.5	.24	.24			
	35-49				0.05-0.13		0.0-0.5	.24	.24			
	49-79			0.20-0.60	0.05-0.13		0.0-0.5	.24	.24			
	79-80	6-15	1.80-1.90	0.01-0.06	0.02-0.05	0.0-2.9	0.0-0.5	.24	.24	ļ		
!												
Haugen	0 - 7		1.40-1.65		0.12-0.14		1.0-3.0	.24	.24	5	3	86
!	7-15		1.40-1.70		0.08-0.19		0.5-1.0	.24	.24	ļ		ļ
	15-23			0.60-2.00	0.08-0.19		0.5-1.0	.24	.24			
l l	23-35			0.60-2.00	0.05-0.16		0.0-0.5	.24	.24			
l I	35-49 49-79			0.20-0.60	0.05-0.13		0.0-0.5	.24	.24			
	79-80			0.01-0.06	1		0.0-0.5	.24	.24		 	 
· ·	79-60	0-13	1.60-1.90	0.01-0.06	0.02-0.05	0.0-2.9	0.0-0.5	.24	.24	l I	 	l I
542C:		 	 			 			 	 	 	
Haugen, very stony	0-4	   6-14	  1 40-1 65	0.60-2.00	0 12-0 14	   0 0-2 9	1.0-3.0	.24	.24	   5	3	86
naugen, very been,	4-15		•	0.60-2.00	•	•	0.5-1.0	.24	.24		3	00
i	15-23			0.60-2.00			0.5-1.0	.24	.24	i		i
i	23-35		•	0.60-2.00	•	•	0.0-0.5	.24	.24	i		i
i	35-49		•	0.20-0.60	•	•	0.0-0.5	.24	.24	i	İ	i
i	49-79			0.20-0.60			0.0-0.5	.24	.24	İ	İ	i
i	79-80			0.01-0.06	1		0.0-0.5	.24	.24	İ	İ	İ
i		i	İ		i		i	i	i	İ	İ	İ
Haugen	0 - 7	6-14	1.40-1.65	0.60-2.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	5	3	86
į	7-15	4-14	1.40-1.70	0.60-2.00	0.08-0.19	0.0-2.9	0.5-1.0	.24	.24			
į	15-23	4-14	1.40-1.70	0.60-2.00	0.08-0.19	0.0-2.9	0.5-1.0	.24	.24			
İ	23-35	5-15	1.40-1.70	0.60-2.00	0.05-0.16	0.0-2.9	0.0-0.5	.24	.24			
İ	35-49			0.20-0.60			0.0-0.5	.24	.24			
	40 50	0 10	1 40-1 70	0.20-0.60	0 05-0 13	0 0-2 9	0.0-0.5	.24	.24	I .	I	I
4   7	49-79			0.01-0.06	1		0.0-0.5	.27	.21	1		1

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	Clay	   Moist	Permea-	Available		   Organic	Erosi	on fac	tors	erodi-	Wind  erodi-
and soil name		 	bulk density	bility	water  capacity	extensi- bility	matter	Kw	   Kf	   T	bility  group	bility  index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
543B:		 										
Anigon	0-10	   10-20	  1 25-1 45	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	.37	   .37	   4	   5	56
111119011	10-14		1.35-1.55		0.20-0.22		0.5-1.0	.43	.43	-		30
i	14-20		1.50-1.60		0.20-0.22		0.0-0.5	.43	.43	i	İ	i
i	20-30	18-27	1.50-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	.43	.43	i	İ	i
j	30-34	6-20	1.55-1.75	6.00-20	0.07-0.19	0.0-2.9	0.0-0.5	.24	.24	İ	į	į
	34-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			[
543C2:		 i										
Anigon	0-10	   10-20	  1 25_1 45	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	.37	   .37	   4	   5	56
Alligoli	10-14			0.60-2.00	0.20-0.22		0.5-1.0	.43	.43	**	5	56
,	14-20			0.60-2.00	0.20-0.22		0.0-0.5	.43	.43	 	1	
ļ	20-30				0.20-0.22		0.0-0.5	.43	.43	i	i	i
i	30-34		1.55-1.75		0.07-0.19		0.0-0.5	.24	.24	i	İ	i
	34-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	İ	į	į
								-				-
544F:	0-1	   0-0	  0.15-0.30	6 00-20	0.55-0.65		   65-85	.02	   .02	   5	2	134
menanga	1-2		1.40-1.65		0.06-0.08		0.5-2.0	.02	.02	]	4	134
,	2-25		1.25-1.60		0.05-0.10		0.0-0.5	1.10	1.15	 	 	1
	25-80		1.50-1.65		0.02-0.07		0.0-0.5	.10	.15	İ		İ
							[	1				[
Mahtomedi	0-5		1.40-1.60		0.09-0.11		0.5-1.0	.10	.10	5	2	134
l l	5-8		1.40-1.50		0.02-0.07		0.0-0.5	.10	.10	ļ	ļ	!
ļ ,	8-15 15-30		1.45-1.75		0.02-0.07		0.0-0.5	.05	.10			-
	30-60		1.45-1.75   1.45-1.75		0.02-0.07		0.0-0.5	.05	.10   .10	 		
		0 20		0.00 =0								İ
555A:					[		[	1				
Fordum	0-6			0.60-2.00	0.17-0.24		4.0-12	.32	.32	4	5	56
	6-18			0.60-6.00	0.10-0.22		1.0-12	.37	.37			!
l l	18-30		1.40-1.50		0.10-0.22		1.0-12	.37	.37			
	30-60	2-5	1.55-1.70	6.00-20	0.04-0.10	0.0-2.9	0.5-1.0	.15	.15	 	 	1
574B:		! 					i	i				i
Sayner	0-2	2-10	1.25-1.45	2.00-6.00	0.08-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	2-4	0-10	1.35-1.55	2.00-20	0.04-0.11	0.0-2.9	0.5-1.0	.10	.10			
	4-7		1.35-1.65		0.03-0.11	0.0-2.9	1.0-2.0	.10	.10			
	7-14		1.35-1.65		0.03-0.11		1.0-2.0	.02	.02			
l l	14-22		1.45-1.70		0.03-0.11		0.0-0.5	.02	.02	ļ	ļ	!
	22-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	 		
574C:		 	 				i İ		 			
Sayner	0-2	2-10	1.25-1.45	2.00-6.00	0.08-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
ļ.	2-4	0-10	1.35-1.55	2.00-20	0.04-0.11	0.0-2.9	0.5-1.0	.10	.10	ĺ	İ	İ
	4-7	0-10	1.35-1.65	2.00-20	0.03-0.11	0.0-2.9	1.0-2.0	1.10	.10			
!	7-14		1.35-1.65		0.03-0.11	0.0-2.9	1.0-2.0	.02	.02			
	14-22		1.45-1.70		0.03-0.11			.02	.02			
	22-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
574E:		 	 		1		[ [	1	 	 	 	1
Sayner	0-2	2-10	1.25-1.45	2.00-6.00	0.08-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
i	2-4		1.35-1.55		0.04-0.11			.10	'	İ	İ	İ
i	4-7	0-10	1.35-1.65	2.00-20	0.03-0.11			.10	.10			
i	7-14	0-10	1.35-1.65	2.00-20	0.03-0.11	0.0-2.9		.02	.02			
i	14-22	0-10	1.45-1.70	2.00-20	0.03-0.11	0.0-2.9	0.0-0.5	.02	.02			
			1.55-1.80		0.01-0.07							

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	   Clay	Moist	Permea-	  Available	1	   Organic	Erosi	on fac	tors	erodi-	Wind  erodi-
and soil name	 	 	bulk density	bility	water  capacity	extensi- bility	matter	Kw	   Kf	   T	bility  group	bility  index
	l In	Pct	g/cc	In/hr	In/in	Pct	Pct	i	İ	i		I
i		İ	j		į ,		ĺ	i	i	i	İ	i
579B:							[					
Parkfalls	0-5	4-15	1.35-1.70	0.60-2.00	0.12-0.14	0.0-2.9	1.0-2.0	.24	.24	4	3	86
	5-8			0.60-2.00	0.09-0.19		0.5-2.0	.24	.24			
	8-17			0.60-2.00	0.09-0.19		0.5-2.0	.24	.24			!
	17-30			0.20-0.60	0.10-0.14		0.0-0.5	.20	.28			
	30-33 33-48			0.20-0.60	0.10-0.14		0.0-0.5	.20	.28			
	33-48   48-80		1.85-2.00	0.20-0.60	0.02-0.04		0.0-0.5	.28	.28		 	
	<del>1</del> 0-00	2-10	1.83-2.00	0.00-0.20	0.00-0.04	0.0-2.9	0.0-0.5	.20	.20		 	 
600A:	 	 	 			l I	İ				 	
Haplosaprists										2	8	0
		İ	İ		i	İ	i	i	i	i		i
Psammaquents		i	i i					ļ		2	8	0
615B:												
Cress	0-3			0.60-2.00	0.12-0.14		0.5-2.0	.24	.24	3	3	86
	3-15			0.60-2.00	0.12-0.17		0.5-1.0	.24	.24			
	15-31		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17	!		
	31-36		1.50-1.80		0.02-0.10	1	0.0-0.5	1.17	.17			
	36-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
615C:	l I	 	 		1	l I	I I		 		 	 
Cress	   0-3	   5_18	  1 25_1 60	0.60-2.00	0.12-0.14	0 0-2 9	0.5-2.0	.24	.24	3	3	86
Cless	3-15			0.60-2.00	0.12-0.17		0.5-1.0	.24	.24	3	3	00
	15-31		1.50-1.80		0.02-0.10		0.0-0.5	1.17	1.17	i	 	
	31-36		1.50-1.80		0.02-0.10		0.0-0.5	1.17	1.17	i	 	
i	36-60		1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	i		i
i							İ			i	İ	i
615D:	İ	į	j i		İ	İ	İ	İ	İ	į	İ	İ
Cress	0-3	5-18	1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	3	3	86
	3-15	5-18	1.40-1.70	0.60-2.00	0.12-0.17	0.0-2.9	0.5-1.0	.24	.24	İ	İ	į
	15-31	0-8	1.50-1.80	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.17	.17	ĺ	İ	İ
	31-36	0-8	1.50-1.80	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.17	.17			
	36-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
623A:							!	!		ļ		!
Capitola	0-5			2.00-6.00	0.35-0.45		50-80	.02	.02	4	8	0
	5-7			0.60-2.00	0.16-0.24		3.0-10	.37	.37	!		
	7-22			0.60-2.00	0.09-0.22		0.5-1.0	.43	.43			
	22-33			0.60-2.00 0.01-0.06	0.07-0.16		0.0-0.5	.28	.28			
	33-60	2-10	1.70-1.90	0.01-0.06	0.03-0.07	0.0-2.9	0.0-0.5	.28	.28		 	 
624A:	 	 	 			 			 	 	 	 
Ossmer	0-4	   8-15	  1 35-1 55	0.60-2.00	0 20-0 24	0 0-2 9	2.0-3.0	.37	.37	4	   5	56
OBBINCI	4-6			0.60-2.00			0.0-1.0	.37	.37	-	3	30
j	6-11			0.60-2.00			0.0-0.5	.37	.37	i		
	11-26			0.60-2.00					.37	i	İ	i
	26-34			0.60-2.00				.32	.32	i	İ	i
i	34-38			0.60-2.00				1	.32	i	į	i
j	38-60		1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	į	į	į
İ			l i									
632A:												
Aftad	0-10			0.60-2.00			1.0-3.0	.28	.28	5	3	86
	10-29			0.60-2.00				.43	.43			
	29-36			0.60-2.00					.43			[
	36-41			0.60-2.00				.43	.43			
	41-60	5-12	1.50-1.70	0.20-0.60	0.11-0.22	0.0-2.9	0.0-0.5	.24	.24	ļ		!

Table 24.--Physical Properties of the Soils--Continued

Map symbol   and soil name	Depth	Clay	   Moist   bulk	Permea- bility	Available water	   Linear  extensi-	   Organic   matter		on fac		wind  erodi-  bility	
			density	DILLEY	capacity	bility	Maccel	Kw	Kf	   т	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct		1	<u> </u>		
į		į	İ		İ	j	j	İ	į	İ	į	İ
332B:					İ	<u> </u>	<u> </u>				[	
Aftad	0-10				0.14-0.18		1.0-3.0	.28	.28	5	3	86
ļ	10-29			0.60-2.00	0.09-0.19		0.5-1.0	.43	.43			
	29-36 36-41			0.60-2.00 0.60-2.00	0.10-0.19		0.0-0.5	.43	.43	 	 	 
ļ	41-60				0.10-0.19		0.0-0.5	.24	.24	l I	 	 
i		0 ==								i	<u> </u>	i
332C:			İ		i	İ	İ	İ	i	İ	i	İ
Aftad	0-10	3-8	1.35-1.65	0.60-2.00	0.14-0.18	0.0-2.9	1.0-3.0	.28	.28	5	3	86
I	10-29	3-12	1.45-1.70	0.60-2.00	0.09-0.19	0.0-2.9	0.5-1.0	.43	.43			
I	29-36	6-14	1.50-1.70	0.60-2.00	0.10-0.19	0.0-2.9	0.0-0.5	.43	.43			
	36-41				0.10-0.19		1	.43	.43			!
	41-60	5-12	1.50-1.70	0.20-0.60	0.11-0.22	0.0-2.9	0.0-0.5	.24	.24			
								1				
633F:     Pence	0-3	   3_1F	  1 30_1 70	2.00-6.00	0.11-0.15	0 0-2 0	1.0-3.0	.24	.24	   3	   3	   86
	3-8			0.60-6.00	0.11-0.13		0.5-1.0	.24	.24	3		80
ļ	8-15			0.60-6.00	'			1.17	.24	i		İ
	15-21		1.65-1.75		0.05-0.08		0.0-0.5	.05	.10	i	i	İ
İ	21-60		1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	İ	į	į
İ					İ	ĺ	ĺ	Ì	ĺ	ĺ	ĺ	ĺ
Padus	0-2	3-15	1.35-1.70	0.60-2.00	•		1.0-3.0	.24	.24	4	3	56
I	2-3			0.60-2.00	0.09-0.19	1	0.5-1.0	.24	.24			
	3-19				0.09-0.19		1	.24	.24			!
	19-26			0.60-2.00	0.06-0.19		0.0-0.5	.24	.24	ļ		
ļ	26-38			0.60-2.00	'		1	.24	.24			
l l	38-60	U-5 	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	 	 	 
648B:			 			 	 		1	l I	 	 
Sconsin	0-4	9-14	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	2.0-3.0	.37	.37	4	5	56
	4-5			0.60-2.00	0.20-0.22		0.5-1.0	.37	.37	i -		
į	5-10				0.20-0.22		0.5-1.0	.37	.37	i	i	İ
į	10-18	5-14	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	.37	.37	İ	į	į
I	18-27	5-14	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	.37	.37			
I	27-34			0.60-2.00	0.05-0.19		0.0-0.5	.32	.32			
	34-38			0.01-0.20	'		1	.24	.24	ļ		!
	38-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
(70G)								1				
670C:     Keweenaw	0-2	   F-20	  1 35_1 60	2.00-6.00	0.09-0.14	0 0-2 9	1.0-2.0	.20	.20	   5	   3	   86
reweenaw	2-4			2.00-6.00	0.09-0.14		0.5-1.0	1.17	.24	]	3	86 
i	4-16			2.00-6.00	'			.17	.24	i I	 	l I
i	16-20			2.00-6.00			0.0-0.5	.17	.24	i	i	i
į	20-27	2-10	1.55-1.80	0.60-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.24	i	į	į
İ	27-43	2-15	1.55-1.80	0.60-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.24	ĺ	İ	ĺ
I	43-75	5-20	1.55-1.80	0.60-6.00	0.08-0.13	0.0-2.9	0.0-0.5	.17	.24			
ļ	75-80	2-10	1.50-1.70	2.00-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
					ļ							!
Pence	0-3			2.00-6.00				.24	.24	3	3	86
ļ	3-8			0.60-6.00								
	8-15 15-21			0.60-6.00	'			.17		 	 	 
	15-21 21-60		1.65-1.75  1.55-1.80		0.05-0.08			.05	10	I I	 	 
 	21-00	0-3	1.55-1.60	3.00-20		0.0-2.9	0.0-0.3	.10	.13	i	! 	! 
570E:								i	İ	i		
Keweenaw	0-2	5-20	1.35-1.60	2.00-6.00	0.09-0.14	0.0-2.9	1.0-2.0	.20	.20	5	3	86
i	2-4			2.00-6.00						İ	İ	İ
į	4-16			2.00-6.00					.24			
į	16-20	2-10	1.55-1.80	2.00-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.24			
	20-27			0.60-6.00								
	27-43			0.60-6.00				.17	.24			
	43-75			0.60-6.00					.24			
	75-80	2-10	1.50-1.70	2.00-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17	1		

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	   Clay	Moist	   Permea-	Available		Organic	Erosi	on fac	tors		Wind  erodi-
and soil name		 	bulk   density	bility 	water  capacity	extensi- bility	matter	Kw	   Kf	   T	bility  group	-
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	İ		Ī		İ
670E:				 		 						
Pence	0-3	   3-15	1.30-1.70	2.00-6.00	0.11-0.15	0.0-2.9	1.0-3.0	.24	.24	   3	   3	   86
	3-8			0.60-6.00	0.11-0.18		0.5-1.0	.24	.24	]	]	00
i	8-15			0.60-6.00	0.10-0.15		1.0-2.0	.17	.24	İ	İ	İ
İ	15-21	0-6	1.65-1.75	2.00-60	0.05-0.08	0.0-2.9	0.0-0.5	.05	.10	İ	İ	į
	21-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			ļ
671B:		 	 	 		 			 	 	 	 
Spoonerhill, stony	0-3	2-15	1.35-1.70	2.00-6.00	0.12-0.14	0.0-2.9	1.0-2.0	.24	.24	5	8	0
,	3-12			2.00-6.00	0.06-0.14		0.5-1.0	.17	.24		ĺ	İ
i	12-16	2-15	1.55-1.80	2.00-6.00	0.05-0.13	0.0-2.9	0.0-0.5	.17	.24	i	İ	į
İ	16-34	2-10	1.55-1.80	0.60-2.00	0.03-0.10	0.0-2.9	0.0-0.5	.17	.24	ĺ	ĺ	ĺ
I	34-46	2-10	1.80-1.85	0.20-0.60	0.03-0.10	0.0-2.9	0.0-0.5	.17	.17			
	46-80	2-10	1.80-1.85	0.20-0.60	0.03-0.10	0.0-2.9	0.0-0.5	.17	.17			
Spoonerhill	0-3	   2-15	  1 35-1 70	2.00-6.00	0.12-0.14	   0.0-2.9	1.0-2.0	.20	.20	   5	   8	   0
bpoonermili	3-12			2.00-6.00	0.06-0.14		0.5-1.0	1.17	.24	]	0	<b>U</b>
	12-16			2.00-6.00	0.05-0.13		0.0-0.5	.17	.24	i	! 	
i	16-34			0.60-2.00	0.03-0.10		0.0-0.5	.17	.24	İ	İ	İ
İ	34-46	2-10	1.80-1.85	0.20-0.60	0.03-0.10	0.0-2.9	0.0-0.5	.17	.17	İ	j	į
I	46-80	2-10	1.80-1.85	0.20-0.60	0.03-0.10	0.0-2.9	0.0-0.5	.17	.17			
680B:	0-1		0.15-0.40		0 35 0 45	 	30-80	.02	.02	   4	   3	   86
Stanberry, stony	1-3			0.60-2.00	0.35-0.45		0.5-2.0	.02	.02	4± 	3 	86 
	3-19			0.60-2.00	0.12-0.22		0.5-2.0	.24	.24	l I	 	 
	19-24			0.20-0.60	0.09-0.14		0.0-0.5	.20	.28	i I	 	 
	24-32			0.20-0.60	0.09-0.14		0.0-0.5	.20	.28	i		İ
i	32-42	5-10	1.65-1.85	0.20-0.60	0.06-0.11		0.0-0.5	.20	.28	i	İ	İ
İ	42-80	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.28	.28	ĺ	ĺ	ĺ
_												
Pence, stony	0-3			2.00-6.00	0.11-0.15		1.0-3.0	.24	.24	3	3	86
	3-8 8-15			0.60-6.00	0.11-0.18		0.5-1.0	1.17	.24	 	 	l I
	15-21		1.65-1.75	'	0.05-0.08		0.0-0.5	.05	1 .10	l I	 	 
	21-60		1.55-1.80	'	0.01-0.07		0.0-0.5	.10	.15	i		İ
İ		į	İ	İ	İ	İ	İ	İ	į	İ	j	İ
683A:			!		İ							
Tipler	0-3			0.60-2.00	0.10-0.15		2.0-3.0	.24	.24	4	3	86
	3-5			0.60-2.00	0.08-0.19	!	0.5-1.0	.24	.24			
	5-19 19-26			0.60-2.00	0.09-0.19		1.0-2.0	.24	.24	 	 	l I
	26-33			'	0.06-0.19		0.0-0.5	.24	.24	l I	 	 
	33-60	:	1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	i		İ
İ		ĺ		İ	İ			Ì	ĺ	ĺ	ĺ	ĺ
706A:												
Winterfield	0-7		0.90-1.50		0.17-0.19			.37	.37	5	3	86
	7-60	U-10	1.55-1.65	6.00-20 	0.04-0.10	U.U-2.9 	0.0-0.5	1.10	.17	 	 	l I
Totagatic	0-4	5-15	1.30-1.55	6.00-20	0.15-0.17	0.0-2.9	1.0-2.0	.28	.28	   5	   3	86
-	4-8		1.40-1.65		0.05-0.15			.10	.15	i	į	İ
i	8-17	0-10	1.40-1.65	6.00-20	0.05-0.15			.10	.15	İ	İ	İ
İ	17-28	0-10	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-10	.10	.15			
I	28-46		1.40-1.65		0.05-0.10			.10	.15			
I	46-70		1.40-1.65		0.02-0.10		1	.10	.15			ļ.
	70-80	0-10	1.40-1.65	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.10	.15			
			[									

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	   Depth 	   Clay 	   Moist     bulk	Permea- bility	Available water	   Linear  extensi-	Organic   matter	Erosi	on fac	cors 		Wind  erodi-  bility
	İ		density		capacity	bility		Kw	Kf	т	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
724A:	 					l I						
Rib	   0-7	   10-20	  1.25-1.35	0.60-2.00	0.22-0.28	0.0-2.9	3.0-10	.32	.32	   4	   5	   56
NID.	7-10				0.18-0.22	1	0.0-1.0	.43	.43	-	3	30
	10-32				0.18-0.22	1	0.5-1.0	.43	.43	İ	i	i
	32-35	5-25	1.45-1.75	0.60-2.00	0.10-0.19	0.0-2.9	0.0-0.5	.32	.32	į	į	į
	35-37	2-10	1.65-1.75	2.00-6.00	0.05-0.08	0.0-2.9	0.0-0.5	.10	.15			
	37-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
Rock outcrop.	   	   				 			   	   		
726B:	 	 	 			 			 	 	 	
Sissabagama	0-10	2-12	1.35-1.60	6.00-20	0.09-0.11	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	10-31	2-12	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15			
	31-45	2-12	1.50-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
	45-80	5-15	1.50-1.65	0.20-0.60	0.05-0.20	0.0-2.9	0.0-0.5	.24	.24	 		
733A:	 		i i									
Wozny	0-3	0 - 0	0.15-0.35		0.35-0.45	1	50-80	.02	.02	5	8	0
	3-17				0.20-0.22		0.5-1.0	.32	.32			
	17-37				0.12-0.22	1	0.5-1.0	.43	.43			
	37-56				0.12-0.19	1	0.5-1.0	.24	.24			
	56-80 	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	1.10	.17	 	 	 
771A:	İ	İ	i i		i	İ		İ	İ	İ	İ	İ
Lenroot	0-4		1.40-1.60		0.09-0.11	1	0.5-1.0	.10	.10	5	2	134
	4-8		1.45-1.75		0.02-0.10	1	0.0-0.5	.05	.10			!
	8-14		1.45-1.75		0.02-0.10	1	0.0-0.5	.05	.10			
	14-21   21-80		1.45-1.75   1.45-1.75		0.02-0.07	1	0.0-0.5	.05	.10   .10	 	 	 
						İ		İ		İ	İ	İ
827A:												
Scoba	0-9   9-16				0.12-0.14	1	2.0-3.0	.24	.24	4	5	56
	16-20				0.07-0.19	1	0.0-0.5	.24	.34	l I	 	
	20-26				0.07-0.19	1	0.0-0.5	.24	.24	 	 	
	26-31				0.03-0.10	1	0.0-0.5	.17	.17	i		i
	31-60		1.55-1.80		0.01-0.07	1	0.0-0.5	.10	.15	İ	İ	
853C:	  -					 						
Frogcreek	0-4	5-12	  1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	   5	8	0
	4-13	5-12	1.45-1.65	0.60-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.37	.37	ĺ	İ	ĺ
	13-19				0.07-0.20	1	0.0-0.5	.20	.28			
	19-32			0.20-0.60			0.0-0.5	.20	.28			
	32-46			0.20-0.60			0.0-0.5	.20	.28			
	46-80 	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	1.10	.17	 	 	 
Stinnett	0-4			0.60-2.00	•				.37	5	8	0
	4-7			0.60-2.00	•				.37			
	7-18			0.60-2.00					.37	ļ		!
	18-29			0.60-2.00		1		1	.37			
	29-34 34-41			0.20-0.60 0.20-0.60	•				.28 .28	l I	 	1
	41-55			0.20-0.60	•				1.17	I I	 	
	55-80			0.06-0.20	•			1.17	1 .17			
Mogny				2 00 6 00	0.35.0.45		   E0 00				   8	   0
Wozny	0-3   3-17			2.00-6.00 0.60-2.00	•		50-80	.02	.02	5 	8 	U
	17-37			0.60-2.00	•				.43	i		i
	37-56			0.20-0.60	•				.24	i	<u> </u>	i
	56-80			0.06-0.20	•			.10	.17	i	i	i
	I	i	i i		İ	į	į	i	i	İ	i	i

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	   Clay	   Moist     bulk	Permea- bility	  Available   water	   Linear  extensi-	   Organic   matter	Erosi	on fac	tors	Wind  erodi-  bility	
and soil name	<u> </u>	 	bulk     density	DILLEY	water  capacity	extensi-   bility	matter	Kw	   Kf	   T	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	[	[	[	Ţ.	[
56B:		 				l I						
oom: Stinnett	0-4	   5-12	  1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	   5	8	   0
	4-7	!		0.60-2.00	0.20-0.22	1	0.0-0.5	.37	.37			
i	7-18		1.40-1.65		0.20-0.22	0.0-2.9	0.0-0.5	.37	.37	i	İ	i
İ	18-29	8-17	1.45-1.65	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37	İ	į	į
I	29-34	6-16	1.65-1.85	0.20-0.60	0.07-0.19	0.0-2.9	0.0-0.5	.28	.28			
	34-41	7-18	1.65-1.85	0.20-0.60	0.07-0.19	0.0-2.9	0.0-0.5	.28	.28			
	41-55	,	1.65-1.85		0.07-0.19	1	0.0-0.5	.10	.17			!
	55-80	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.17	.17	 		
57B:		 				 	 			 		 
Frogcreek	0 - 4	5-12	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	5	8	0
I	4-13	5-12	1.45-1.65	0.60-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.37	.37			
I	13-19	6-16	1.65-1.85	0.20-0.60	0.07-0.20	0.0-2.9	0.0-0.5	.20	.28			
	19-32				0.07-0.19	1	0.0-0.5	.20	.28			
	32-46	!	1.65-1.85		0.07-0.19	1	0.0-0.5	.20	.28	ļ		!
	46-80	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17			
57C:		 				 	 		 	 		 
Frogcreek	0 - 4	5-12	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	5	8	0
Ī	4-13	5-12	1.45-1.65	0.60-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.37	.37	İ	į	į
I	13-19	6-16	1.65-1.85	0.20-0.60	0.07-0.20	0.0-2.9	0.0-0.5	.20	.28			
I	19-32	7-18	1.65-1.85	0.20-0.60	0.07-0.19	1	0.0-0.5	.20	.28			
	32-46	!	1.65-1.85		0.07-0.19		0.0-0.5	.20	.28			
	46-80	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17			
/3B:		 				 	 		 	 		 
Stanberry	0-1	0-0	0.15-0.40	6.00-20	0.35-0.45	i	30-80	.02	.02	4	3	86
I	1-3	5-12	1.35-1.70	0.60-2.00	0.12-0.22	0.0-2.9	0.5-2.0	.24	.24			
I	3-19	6-14	1.35-1.70	0.60-2.00	0.09-0.19	0.0-2.9	0.5-2.0	.24	.24			
	19-24	!		0.20-0.60	0.09-0.14	1	0.0-0.5	.20	.28			
	24-32	!	1.65-1.85		0.09-0.14	1	0.0-0.5	.20	.28	ļ		!
	32-42		1.65-1.85		0.06-0.11	1	0.0-0.5	.20	.28			
	42-80	2-10 	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.28	.28	 		
73C:		İ	i i			İ	İ					i
Stanberry	0-1	0 - 0	0.15-0.40	6.00-20	0.35-0.45		30-80	.02	.02	4	3	86
	1-3				0.12-0.22	1	0.5-2.0	.24	.24			
	3-19			0.60-2.00	0.09-0.19	1	0.5-2.0	.24	.24			
	19-24		1.65-1.85		0.09-0.14	1	0.0-0.5	.20	.28			
	24-32 32-42		1.65-1.85   1.65-1.85		0.09-0.14	1	0.0-0.5	.20	.28 .28	 		
	42-80				0.00-0.11	1	0.0-0.5	.28	.28	 		 
	12 00			0100 0120						İ		i
73D:		ĺ	į į				ĺ	İ	ĺ	ĺ		ĺ
Stanberry	0-1		0.15-0.40		0.35-0.45	1	30-80	.02	.02	4	3	86
	1-3			0.60-2.00				1	.24	ļ		!
	3-19	,			0.09-0.19	1	1	1	.24			
	19-24 24-32	!			0.09-0.14			1	.28 .28			
	32-42				0.09-0.14			1	.28	l I	1	1
	42-80				0.02-0.05	1	1	1	.28	 		
į		İ	i i		İ	İ	İ	İ	İ	İ	İ	i
05A:												
Cublake	0-3	!	1.40-1.65		0.09-0.11			1.10	17	5	1	220
	3-4 4-23		1.35-1.65   1.40-1.70		0.05-0.10				.17   .17	I I	 	I I
	23-32		1.45-1.70		0.05-0.10				.17	I I		
	32-40		1.45-1.70		0.05-0.10				1.15			1
	40-48		11.45-1.70		0.05-0.10				1.15	i		i
	48-60				0.17-0.22			.32	.32	i	İ	i
		i	i		i	i	i	i	i	i	i	i

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	   Clay	Moist	Permea-	Available		Organic	Erosi	on fac	Lors	erodi-	Wind  erodi
and soil name		 	bulk density	bility	water  capacity	extensi-   bility	matter	Kw	   Kf	   T	bility  group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	i i		i		Ī
İ		İ			i		İ	į	İ	į	İ	į
926A:												
Flink	0-3	1	1.40-1.65		0.09-0.11		0.5-2.0	.10	.10	5	1	220
	3-6 6-9	1	1.35-1.60   1.35-1.65		0.05-0.07		0.0-0.5	1.15	.15   .15			
	9-26	1	1.35-1.65   1.35-1.65		0.05-0.10		0.0-0.5	1.15	.15	l I	 	l I
	26-35	1	1.40-1.70		0.05-0.10		0.0-0.5	1.15	1 .15	 		İ
	35-46		1.40-1.70		0.05-0.10		0.0-0.5	.15	.15	i	İ	İ
İ	46-52	10-35	1.40-1.80	0.20-2.00	0.18-0.22	0.0-2.9	0.0-0.5	.32	.32	İ	į	İ
	52-80	5-35	1.40-1.80	0.20-2.00	0.05-0.22	0.0-2.9	0.0-0.5	.32	.32			
0.4.3.5												
943D: Stanberry	0-1	   0-0	  0.15-0.40	6 00-20	0.35-0.45	 	30-80	.02	   .02	   4	3	   86
Scamperry	1-3	1		0.60-2.00	1		0.5-2.0	.24	.24	=	3	80
i	3-19	1		0.60-2.00	0.09-0.19		0.5-2.0	.24	.24	İ		i
i	19-24	1			0.09-0.14		0.0-0.5	.20	.28	İ	İ	i
	24-32	9-17	1.65-1.85	0.20-0.60	0.09-0.14	0.0-2.9	0.0-0.5	.20	.28	į	İ	į
j	32-42	5-10	1.65-1.85	0.20-0.60	0.06-0.11	0.0-2.9	0.0-0.5	.20	.28	ĺ	İ	ĺ
	42-80	2-10	1.85-2.00	0.06-0.20	0.00-0.04	0.0-2.9	0.0-0.5	.28	.28			ļ
<b>3</b>	0.6			2.00-6.00								
Greenwood	0-6 6-60		0.30-0.40   0.10-0.25		0.55-0.65	 	55-75 55-75		 	3	7	38
	0-60	0-0 	0.10-0.25   	0.80-2.00	0.45-0.55	 	55-75		 	 	 	1
948A:		! 			i	! 		i	İ	i		i
Billyboy	0 - 4	9-14	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	2.0-3.0	.37	.37	4	5	56
	4-11	5-14	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	.37	.37	İ	į	į
	11-20	5-15	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	.37	.37			
	20-26	6-17	1.50-1.70	0.60-2.00	0.11-0.19	0.0-2.9	0.0-0.5	.24	.28			
	26-30			0.60-2.00	1		0.0-0.5	.20	.24			
	30-35		1.45-1.65		0.05-0.10		0.0-0.5	.10	.15			
	35-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	 		
970C:		 	 			 		1	 	l I		
Keweenaw	0-2	5-20	1.35-1.60	2.00-6.00	0.09-0.14	0.0-2.9	1.0-2.0	.20	.20	5	8	0
	2-4	5-15	1.45-1.80	2.00-6.00	0.09-0.14	0.0-2.9	0.5-1.0	.17	.24			
	4-16	1		2.00-6.00	1		0.0-0.5	.17	.24			
	16-20	1		2.00-6.00	1		0.0-0.5	.17	.24			
	20-27	1		0.60-6.00	1		0.0-0.5	.17	.24	ļ		!
	27-43			0.60-6.00	1		0.0-0.5	.17	.24			
	43-75 75-80			2.00-6.00	0.08-0.13		0.0-0.5	17	.24 .17	 		
	75-60	2-10	1.50-1.70	2.00-8.00	0.05-0.10	0.0-2.9	0.0-0.5	•1/	•1/	l I	 	1
Pence	0-3	3-15	1.30-1.70	2.00-6.00	0.11-0.15	0.0-2.9	1.0-3.0	.24	.24	3	3	86
j	3-8	3-13	1.35-1.65	0.60-6.00	0.11-0.18	0.0-2.9	0.5-1.0	.24	.24	ĺ	İ	İ
	8-15	5-15	1.35-1.45	0.60-6.00	0.10-0.15	0.0-2.9	1.0-2.0	.17	.24			
	15-21	1	1.65-1.75		0.05-0.08		1	.05	'			
	21-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
Greenwood	0-6	   0-0	  0.30-0.40	6 00-20	0.55-0.65	 	   55-75		 	2	   7	38
Greenwood	6-60			0.60-6.00			55-75			3	<i>'</i>	30
								i	İ	İ		İ
970E:		į	j i		j	İ	į	į	į	i	į	į
Keweenaw	0-2	1		2.00-6.00	1		1	1	.20	5	8	0
	2-4	!		2.00-6.00	1		1	1	.24			ļ
	4-16			2.00-6.00	'				'			ļ
	16-20			2.00-6.00	'				'			ļ
	20-27			0.60-6.00	'				'			
	27-43 43-75			0.60-6.00	'				'	I I	 	I
	43-75 75-80			0.60-6.00 2.00-6.00					.24 .17	I I	 	I I
	,5-00		1	2.00-0.00	13.03-0.10	0.0-2.3	0.0-0.5	/	/	1	!	1

Table 24.--Physical Properties of the Soils--Continued

Map symbol	   Depth	   Clay	   Moist	Permea-	Available		Organic	Erosi	on fac	tors	erodi-	Wind  erodi
and soil name	 		bulk density	bility	water	extensi- bility	matter	   K+.+	   Kf	   m-	bility  group	
	   In	   Pct	density   g/cc	   In/hr	capacity   In/in	Pct	Pct	Kw	11	l T	group	Tugex
	   TU	PCT 	9/66 	111/NT	111/111	PCE 	PCE 		 	 	 	 
970E:	İ	İ	İ		İ	İ	İ	ì	i	i	İ	İ
Pence	0-3	3-15	1.30-1.70	2.00-6.00	0.11-0.15	0.0-2.9	1.0-3.0	.24	.24	3	3	86
	3-8	3-13	1.35-1.65	0.60-6.00	0.11-0.18	0.0-2.9	0.5-1.0	.24	.24			
	8-15			0.60-6.00	0.10-0.15	1	1.0-2.0	.17	.24			
	15-21	1	1.65-1.75		0.05-0.08		0.0-0.5	.05	.10	ļ		
	21-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
Greenwood	   0-6	0-0	0.30-0.40	   6.00-20	0.55-0.65	 	55-75			3	   7	38
	6-60	1	0.10-0.25		0.45-0.55		55-75	i		i	İ	İ
	į	į	İ	İ	j	İ	İ	į	į	į	į	İ
1070C:						[	[					
Fremstadt	0-5		1.35-1.60		0.12-0.14	1	1.0-2.0	.20	.20	5	8	0
	5-33	1	1.45-1.80		0.08-0.11	1	0.6-1.0	.15	.17	ļ		
	33-37		1.50-1.80		0.05-0.11		0.0-0.5	.15	.17	ļ		
	37-45	1	1.50-1.80		0.05-0.11		0.0-0.5	.15	.17			
	45-70	1	1.50-1.70		0.04-0.10	1	0.0-0.5	.15	.17			
	70-80	2-10	1.50-1.70	2.00-6.00	0.04-0.10	0.0-2.9	0.0-0.5	.15	.17			
Cress	0-3	   5-18	  1 25-1 60	   0.60-2.00	0.12-0.14	0 0-2 9	0.5-2.0	.24	.24	   3	3	   86
Clebb	3-15	1	1	0.60-2.00	0.12-0.17		0.5-1.0	.24	.24	]	3	00
	15-31	1	1.50-1.80		0.02-0.10	1	0.0-0.5	.17	.17		 	İ
	31-36		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17	i		i
	36-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	İ	İ	İ
	ĺ	İ	ĺ		İ	ĺ	ĺ	İ	ĺ	ĺ	İ	
1070D:												
Fremstadt	0-5		1.35-1.60		0.12-0.14	1	1.0-2.0	.20	.20	5	8	0
	5-33	1	1.45-1.80		0.08-0.11	1	0.6-1.0	.15	.17	ļ		
	33-37		1.50-1.80		0.05-0.11		0.0-0.5	.15	.17	ļ		ļ
	37-45	1	1.50-1.80		0.05-0.11	1	0.0-0.5	.15	.17			
	45-70   70-80	,	1.50-1.70	2.00-20	0.04-0.10	1	0.0-0.5	1.15	.17   .17			
	70-80 	2-10	1.50-1.70	2.00-6.00	0.04-0.10	0.0-2.9	0.0-0.5	.15	.1/	l I	 	l I
Cress	0-3	5-18	1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	3	3	86
	3-15			0.60-2.00	0.12-0.17		0.5-1.0	.24	.24	i		İ
	15-31		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17	İ	İ	İ
	31-36	0-8	1.50-1.80	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.17	.17	İ	İ	İ
	36-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	ĺ	İ	ĺ
			!		!			ļ				
1080B:												
Spoonerhill	0-3 3-12	,		2.00-6.00	0.12-0.14		1.0-2.0	.24	.24	5	8	0
	12-16	1	1	2.00-6.00	0.05-0.14	1	0.0-0.5	1 .17	.24	 	 	l I
	16-34	1	1	0.60-2.00	1	1	0.0-0.5	1.17	.24	l I	 	l I
	34-46	1	1	0.20-0.60	1	1		1	1.17		 	l I
	46-80			0.20-0.60			0.0-0.5	.17	.17	i		i
	j	į	İ	İ	j	İ	İ	į	į	į	į	j
Spoonerhill, stony	0-3	2-15	1.35-1.70	2.00-6.00	0.12-0.14	0.0-2.9	1.0-2.0	.24	.24	5	8	0
	3-12	,		2.00-6.00	,			.17	.24			
	12-16			2.00-6.00			0.0-0.5	.17	.24			
	16-34			0.60-2.00	•			.17	.24			
	34-46			0.20-0.60	•		0.0-0.5	.17	17			
	46-80	2-10	1.80-1.85	0.20-0.60	0.03-0.10	0.0-2.9	0.0-0.5	.17	.17	1		
Cress	0-3	   5-19	  1.25-1 60	0.60-2.00	0.12-0 14	0.0-2 9	0.5-2.0	.24	.24	   3	   3	   86
	3-15			0.60-2.00	0.12-0.14		0.5-1.0	.24	.24		3	00
	15-31		1.50-1.80		0.02-0.10			1.17	1.17	i		i
	31-36		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17	i	İ	i
	36-60		1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	i	i	i

Table 24.--Physical Properties of the Soils--Continued

Map symbol   and soil name	Depth	   Clay	   Moist   bulk	Permea-   bility	Available water	   Linear  extensi-	   Organic   matter	ETOSI	on fac	Lors	Wind  erodi-  bility	
and soll hame		 	density	DITTLY	capacity	bility	Maccer	Kw	   Kf	   т	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct			<u> </u>		
į		İ		, ·	į ,			İ	İ	İ	İ	İ
1653C:												
Stanberry	0-1		0.15-0.40		0.35-0.45		30-80	.02	.02	4	3	86
	1-3			0.60-2.00	'		0.5-2.0	.24	.24			
l l	3-19 19-24			0.60-2.00	0.09-0.19		0.5-2.0	.24	.24	 	 	 
· ·	24-32				0.09-0.14		1	.20	.28	 	 	 
i	32-42			0.20-0.60	0.06-0.11		0.0-0.5	.20	.28	i	<u> </u>	
į	42-80				0.02-0.05		0.0-0.5	.28	.28	į	į	İ
I												
Parkfalls	0-5			0.60-2.00	'		1.0-2.0	.24	.24	4	3	86
	5-8				0.09-0.19		0.5-2.0	.24	.24			
ļ	8-17 17-30				0.09-0.19		0.5-2.0	.24	.24	 		 
ļ	30-33				0.10-0.14			.20	.28	l I	 	 
i	33-48			0.20-0.60	0.04-0.07		0.0-0.5	.20	.28	İ	 	
i	48-80				0.03-0.05		0.0-0.5	.28	.28	İ	i	İ
į		į	İ		j	İ	İ	İ	į	į	į	į
Wozny	0-3	0 - 0	0.15-0.35	2.00-6.00	0.35-0.45		50-80	.02	.02	5	8	0
ļ	3-17	1	1	0.60-2.00	0.20-0.22		0.5-1.0	.32	.32			
	17-37	!	1		0.12-0.22		0.5-1.0	.43	.43	ļ		
ļ	37-56			0.20-0.60	0.12-0.19	1	0.5-1.0	.24	.24			
ļ	56-80	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17	 	 	l I
2015.		 	I I			I I	l I	l I	 	 	 	 
Pits		İ	İ		i	İ	İ	İ	İ	i	i	İ
į		İ	İ		j	ĺ	ĺ	İ	j	İ	į	į
2050.												
Landfill			!		İ	!	!					
3011A:     Barronett	0-9	0 22	  1 25 1 50	0.60-2.00	10 20 0 26		3.0-10	.32	   .32	   5	   5	   56
barronect	9-16				0.18-0.22		1	.43	.43	5	5	56
i	16-34			0.60-2.00	0.18-0.22		0.0-0.5	.43	.43	İ		
i	34-60				0.12-0.22		0.0-0.5	.37	.37	İ	i	İ
İ		ĺ	ĺ		İ	ĺ	ĺ	ĺ	ĺ	ĺ	ĺ	ĺ
3125A:												
Meehan	0-5		1.35-1.65		0.09-0.11		0.5-3.0	.10	.10	5	2	134
ļ	5-8	!	1.60-1.70		1	0.0-2.9	1	.15	.15			
l l	8-28 28-60		1.60-1.70  1.60-1.70		0.02-0.10		0.0-0.5	1.15	.15   .15	 	 	 
· ·	20-00	0- <del>1</del>	1.00-1.70	0.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.13	.13	 	 	 
3126A:		 	İ			İ		i	 	i		
Wurtsmith	0-9	0-10	1.30-1.65	6.00-20	0.07-0.09	0.0-2.9	1.0-6.0	.10	.10	5	2	134
İ	9-37	0-5	1.40-1.60	6.00-20		0.0-2.9	0.0-0.5	.15	.15	ĺ	ĺ	ĺ
ļ	37-60	0-5	1.50-1.65	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15		[	
3276A:   Au Gres	0-2			   0.60-2.00	0 35 0 45	 	 			   5	   2	   134
Au Gies	2-5	1	1.50-1.70		1	0.0-2.9	65-85 0.6-1.0	.02	.02 .10	5	4	134
i	5-8		1.50-1.70		0.06-0.11			1.10	1 .10	 	 	 
i	8-16		1.50-1.70		0.06-0.11		1	.10	.10	i	i	İ
į	16-28		1.50-1.70		0.06-0.11			.02	.02	İ	İ	İ
į	28-60	0-5	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02			
												ļ
3312B:												
Glendenning, very	0 5		1 40 1 65	0 60 2 22			1 1 0 2 2					
stony	0-5 5-15			0.60-2.00				.24	.24	4	8	0
	15-20			0.60-2.00				1.17	.24	I I	 	I I
	20-26			0.60-2.00				.17	.24	i		İ
i	26-40			0.20-0.60				.17	.24	i	į	į
										1		
Ï	40-65	7-17	1.65-1.90	0.20-0.60	0.07-0.19	0.0-2.9	0.0-0.5	.17	.24			

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	Clay	   Moist	Permea-	Available		Organic		on fac		erodi-	Wind  erodi
and soil name			bulk   density	bility	water	extensi-	matter	1 77	77.5		bility	
	In	   Pct	density   g/cc	In/hr	capacity   In/in	bility   Pct	Pct	Kw	Kf	T	group	Index
					,			ì		i		i
3312B:		İ			İ		ĺ	İ	ĺ	ĺ	ĺ	ĺ
Glendenning	0-7	,		0.60-2.00	,		1.0-2.0	.24	.24	4	8	0
l l	7-15 15-20	,		0.60-2.00 0.60-2.00	,		0.5-1.0	.24	.24		 	
i	20-26	,		0.60-2.00	,		0.0-0.5	1.17	.24		 	l I
i	26-40	,		0.20-0.60	,		0.0-0.5	.17	.24	i	İ	i
į	40-65	7-17	1.65-1.90	0.20-0.60	0.07-0.19	0.0-2.9	0.0-0.5	.17	.24	į	j	į
Į.	65-80	5-15	1.80-2.00	0.01-0.06	0.02-0.05	0.0-2.9	0.0-0.5	.17	.24	ļ		ļ
3336A:			 			 					 	
Fenander	0 - 9	3-8	  1.35-1.65	0.60-2.00	0.15-0.17	0.0-2.9	2.0-3.0	.28	.28	   5	   3	86
	9-15	,		0.60-2.00	,		0.5-1.0	.24	.24			
į	15-27	10-18	1.50-1.70	0.60-2.00	0.12-0.19	0.0-2.9	0.5-1.0	.24	.24	į	j	į
I	27-33	10-18	1.50-1.70	0.60-2.00	0.12-0.19	0.0-2.9	0.5-1.0	.24	.24			
	33-80	5-20	1.40-1.80	0.20-0.60	0.08-0.16	0.0-2.9	0.0-0.5	.32	.32			ļ
3403A:			 		 	 	 	1	 	 	 	l I
Loxley	0-13	0-0	0.30-0.40	6.00-20	0.55-0.65		70-90	.02	.02	3	8	0
-	13-60				0.35-0.45		70-90	.02	.02	İ	İ	İ
Beseman	0-36			0.60-6.00	0.35-0.45		25-75	.02	.02	2	8	0
	36-60	8-25	1.35-1.60	0.20-0.60	0.09-0.22	0.0-2.9 	0.5-1.0	.43	.43		 	 
Dawson	0-8	0-0	0.15-0.30	6.00-20	0.55-0.65		65-85	.02	.02	2	8	0
į	8-38	0-0	0.15-0.40	0.20-6.00			65-85	.02	.02	i	İ	İ
İ	38-40	0-15	1.55-1.75	0.60-2.00	0.18-0.20	0.0-2.9	5.0-15	.37	.37	ĺ	ĺ	Ì
	40-60	0-10	1.55-1.75	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	.15	.15			ļ
3424C:		 	 		 	 	l I		 		 	l I
Frogcreek	0 - 4	5-12	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	5	8	0
j	4-13	,		0.60-2.00	,		1.0-2.0	.37	.37	į	İ	į
İ	13-19	6-16	1.65-1.85	0.20-0.60	0.07-0.20	0.0-2.9	0.0-0.5	.20	.28	ĺ	ĺ	Ì
ļ	19-32	,		0.20-0.60	,		0.0-0.5	.20	.28			
	32-46	,		0.20-0.60	,		0.0-0.5	.20	.28			
	46-80	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17		 	
Magroc	0-2	5-17	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	.37	.37	3	   5	56
i	2-11	5-17	1.55-1.65	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37	į	į	į
I	11-22	5-17	1.55-1.65	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37			
ļ	22-30	1	1	0.60-2.00	1		0.0-0.5	.32	.32			
	30-45				0.06-0.10		0.0-0.5	.17	.17			
	45-50 50-80	2-15	1	0.60-2.00 0.0000-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17		 	
i	50 00			0.0000 20		 				i		i
Stinnett	0 - 4	5-12	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	5	8	0
I	4-7	,		0.60-2.00	,			.37	.37			
Į.	7-18	,		0.60-2.00	,			1	.37			
	18-29	,		0.60-2.00	,				.37			
ļ	29-34 34-41	,		0.20-0.60 0.20-0.60	,				.28 .28		 	
ļ	41-55	,		0.20-0.60	,			1.10	1 .28		 	l I
i	55-80	,		0.06-0.20	,		0.0-0.5	.17	.17	i		i
į		į	j		j	İ	İ	İ	İ	į	j	į
Rock outcrop.												
3446A:		 	 		1	 	[ [	1	 	 	 	
Newson	0-3	0-0	0.10-0.35	6.00-20	0.35-0.55	 	30-80	.02	.02	5	   8	0
Ï	3-8	,	1.35-1.65		0.07-0.12		10-20		.10	İ	İ	İ
i	8-16	1-4	1.70-1.80	6.00-20	0.06-0.11	0.0-2.9	0.1-2.0	.15	.17			
l l					10 00 0 11		0 1 0 0	1 1 -	1 17	1	i	1
	16-22 22-60	,	1.70-1.80  1.70-1.80		0.06-0.11		0.1-2.0	1.15	.17   .15	1		1

Table 24.--Physical Properties of the Soils--Continued

								Erosi	on fac	tors	1	Wind
Map symbol	Depth	Clay	Moist	Permea-	Available		Organic	ļ				erodi
and soil name		 	bulk density	bility	water  capacity	extensi-	matter	   Kw	   Kf		bility  group	index
		<u> </u>						KW	KI	T	group	Index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct		 	l I		 
3448B:						 		1	 			
Grettum	0-3	2-12	1.35-1.60	6.00-20	0.09-0.11	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	3-32	2-12	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15			
	32-75	2-12	1.40-1.65	2.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	ĺ	İ	ĺ
	75-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	ĺ	į	į
3448C:	 	 				 	 		 	 		
Grettum	0-3	2-12	1.35-1.60	6.00-20	0.09-0.11	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	3-32	2-12	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	i	i	i
	32-75	2-12	1.40-1.65	2.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	İ	į	İ
	75-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	į	į	į
3516A:	 	 				 	 		 	 	 	 
Slimlake	0-6	4-10	  1.30-1.70	2.00-6.00	0.12-0.14	0.0-2.9	1.0-3.0	.20	.20	3	3	86
	6-17			2.00-6.00	0.12-0.14		0.0-0.5	.24	.24		i	İ
	17-42	0-3	1.55-1.70	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15	i	i	i
	42-53	0-3	1.55-1.70	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15	i	i	i
	53-80	0-3	1.55-1.70	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15	į	į	į
3629B:	 	 	 			 	 	1	 	 	 	
Perida	0-9	6-8	1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-2.0	.10	.10	4	2	134
	9-43	0-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	i	i	İ
	43-45	2-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	i	i	i
	45-60	50-80	1.45-1.70	0.01-0.06	0.08-0.10	6.0-8.9	0.0-0.5	.28	.28	i	i	i
	60-74	50-80	1.45-1.70	0.01-0.06	0.08-0.10	6.0-8.9	0.0-0.5	.28	.28	i	i	i
	74-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	į	į	į
4-W.	 	 				 	 		 	 	 	 
Miscellaneous water							į	į		į		į
<b>√.</b>	 	 	 			 	[ [	1	 	 	 	 
Water	i	İ	i		i	i	i	i	İ	i	i	i

Table 25.--Chemical Properties of the Soils
(Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth		Effective cation-		Calcium  carbon-
		capacity	capacity		400
	In	meq/100 g	meq/100 g	рН	Pct
3A: Totagatic	0 - 4	   150-230	 	   4.5-6.5	0
10cagacic	4-8	1.0-3.0		4.5-6.5	0
	8-17	1.0-3.0		4.5-6.5	0
İ	17-28	1.0-3.0		4.5-6.5	0
	28-46	1.0-3.0		4.5-6.5	0
	46-70 70-80	1.0-3.0	 	4.5-6.5	0
	70-80	1.0-3.0	<b></b> 	<b>4.</b> 5-6.5 	0
Bowstring	0-38	140-180		5.6-8.4	0
Ī	38-47	1.0-3.0		5.6-8.4	0
	47-80	140-180		5.6-8.4	0
Ausable	0-10	   150-230	 	   5.1-7.3	0
Ausable	10-60	1.0-9.0	 	6.1-7.8	0
	20 00		! 		
22A:		İ			İ
Comstock	0-8	6.0-25		4.5-7.3	0
	8-15 15-21		3.0-20	4.5-6.0	0
	21-34		4.0-25	4.5-6.0	0
	34-44		2.0-25	4.5-6.0	0
j	44-60	2.0-15	2.0-25	5.1-7.3	0
24A: Poskin	0-9	6.0-20	 	   4.5-7.3	0
FOSKIII	9-12	2.0-15	 	4.5-6.5	0
	12-19	3.0-20		4.5-6.5	0
İ	19-36	4.0-20		4.5-6.5	0
	36-39	0.0-15		4.5-6.5	0
	39-60	0.0-6.0		4.5-6.5	0
27A:				<u> </u> 	
Scott Lake	0-10	5.0-20		4.5-7.3	0
İ	10-17	1.0-15		4.5-6.5	0
	17-24	2.0-15		4.5-6.5	0
	24-31 31-80	0.0-10	 	4.5-6.5	0
	31-80	0.0-6.0	 	4.5-6.5 	0
28B:			! 	! 	İ
Haugen, very stony	0 - 4	3.0-17		4.5-6.5	0
	4-15	1.0-15		4.5-6.0	0
	15-23	1.0-15		4.5-6.0	0
	23-35 35-49	1.0-15   1.0-15	 	4.5-6.0	0
	49-79	1.0-15		5.6-6.5	0
	79-80	1.0-15		5.6-6.5	0
_					
Haugen	0-7 7-15	3.0-17 1.0-15		4.5-6.5	0
	7-15 15-23	1.0-15	 	4.5-6.0	0
	23-35	1.0-15		4.5-6.0	0
	35-49	1.0-15		5.6-6.5	0
	49-79	1.0-15		5.6-6.5	0
	79-80	1.0-15		5.6-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-  exchange  capacity	!	Soil  reaction 	Calcium  carbon-   ate
			capacity		
	In	meq/100 g	meq/100 g	pН	Pct
28B:			 	 	
Rosholt, very stony	0-4	3.0-15		4.5-7.3	0
	4-10	1.0-10		4.5-6.5	0
	10-14	1.0-10		4.5-6.5	0
	14-28	1.0-15		4.5-6.5	0
	28-34 34-60	1.0-10	 	4.5-6.5	0   0
	31 00		 		
Rosholt	0-8	3.0-15		4.5-7.3	0
	8-10	1.0-10		4.5-6.5	0
	10-14	1.0-10		4.5-6.5	0
	14-28 28-34	1.0-15	 	4.5-6.5	0   0
	34-60	0.0-6.0	 	4.5-6.5	0
	31 00		 		
28C:		İ		j	į
Haugen, very stony	0 - 4	3.0-17		4.5-6.5	0
	4-15	1.0-15		4.5-6.0	0
	15-23 23-35	1.0-15		4.5-6.0	0   0
	35-49	1.0-15	 	5.6-6.5	0
	49-79	1.0-15		5.6-6.5	0
j	79-80	1.0-15		5.6-6.5	0
Haugen	0-7	3.0-17		4.5-6.5	0
	7-15 15-23	1.0-15	 	4.5-6.0	0   0
	23-35	1.0-15	 	4.5-6.0	0
	35-49	1.0-15		5.6-6.5	0
j	49-79	1.0-15		5.6-6.5	0
	79-80	1.0-15		5.6-6.5	0
Darkelt stem.	0.4	2 0 15	İ		
Rosholt, very stony	0-4 4-10	3.0-15 1.0-10	 	4.5-7.3	0   0
	10-14	1.0-10		4.5-6.5	0
	14-28	1.0-15		4.5-6.5	0
	28-34	1.0-10		4.5-6.5	0
	34-60	0.0-6.0		4.5-6.5	0
Rosholt	0-8 8-10	3.0-15 1.0-10	 	4.5-7.3	0   0
	10-14	1.0-10	 	4.5-6.5	0
	14-28	1.0-15		4.5-6.5	0
	28-34	1.0-10		4.5-6.5	0
	34-60	0.0-6.0		4.5-6.5	0
33B: Chetek	0-10	3.0-16	 	   5.1-7.3	   0
CHECGY	10-16	1.0-15	 	5.1-7.3	0
	16-20	1.0-9.0		5.1-6.0	0
	20-60	1.0-3.0		5.1-6.5	0
					ļ
33C:	0.10		 		
Chetek	0-10 10-16	3.0-16 1.0-15	<b></b>	5.1-7.3   5.1-6.0	0   0
	16-20	1.0-15	 	5.1-6.0	0
	20-60	1.0-3.0		5.1-6.5	0
		İ	İ	İ	i

Table 25.--Chemical Properties of the Soils--Continued

Map symbol   and soil name	Depth	capacity	cation- exchange	!	Calcium  carbon-   ate
		<del>:</del>	capacity		<u> </u>
	In	meq/100 g	meq/100 g	pH	Pct
38A:			 	 	
Rosholt	0-8	3.0-15		4.5-7.3	0
	8-10	1.0-10		4.5-6.5	0
I	10-14	1.0-10		4.5-6.5	0
	14-28	1.0-15		4.5-6.5	0
	28-34	1.0-10		4.5-6.5	0
ļ	34-60	0.0-6.0		4.5-6.5	0
38B:		1	 	 	
Rosholt	0-8	3.0-15		4.5-7.3	0
i	8-10	1.0-10		4.5-6.5	0
į	10-14	1.0-10		4.5-6.5	0
I	14-28	1.0-15		4.5-6.5	0
I	28-34	1.0-10		4.5-6.5	0
	34-60	0.0-6.0		4.5-6.5	0
38C:   Rosholt	0-8	3.0-15	 	   4.5-7.3	0
ROSHOIT	0-8 8-10	1.0-10	 	4.5-7.3	0   0
· ·	10-14	1.0-10	 	4.5-6.5	0
i	14-28	1.0-15	l	4.5-6.5	0
i	28-34	1.0-10		4.5-6.5	0
į	34-60	0.0-6.0		4.5-6.5	0
İ		Ì	ĺ		İ
38D:					
Rosholt	0-8	3.0-15		4.5-7.3	0
	8-10	1.0-10		4.5-6.5	0
ļ	10-14	1.0-10		4.5-6.5	0
ļ	14-28 28-34	1.0-15	 	4.5-6.5	0   0
ļ	34-60	0.0-6.0	 	4.5-6.5	0
i	31 00		! 	1.5 0.5	
42D:		İ			İ
Amery	0-3	3.0-15		4.5-6.5	0
I	3-22		1.0-15	4.5-6.0	0
I	22-34	1.0-15		5.1-6.5	0
ļ	34-41	1.0-15		5.1-6.5	0
!	41-57	1.0-15		5.1-6.5	0
	57-71	1.0-15		5.1-6.5	0
l l	71-80	1.0-15		5.6-6.5	0
43B:			 	 	
Antigo	0-9	4.0-20		4.5-7.3	0
i		3.0-15		4.5-6.5	
į	12-19	3.0-15		4.5-6.5	0
I	19-28	3.0-15		4.5-6.5	0
I	28-31	0.0-15		4.5-6.5	0
		0.0-15		4.5-6.5	0
	33-60	0.0-6.0		4.5-6.5	0
43C:			 	 	1
Antigo	0 - 9	4.0-20	 	4.5-7.3	0
	9-12	'	 	4.5-6.5	0
		3.0-15		4.5-6.5	0
ļ		3.0-15		4.5-6.5	0
İ		0.0-15		4.5-6.5	0
į	31-33	0.0-15		4.5-6.5	0
	33-60	0.0-6.0		4.5-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

		<u> </u>	<u> </u>	<u> </u>	<u> </u>
Map symbol and soil name	Depth		Effective cation-		Calcium
and soil name			exchange		ate
		:	capacity		
	In	meq/100 g	meq/100 g	рн	Pct
43D:			 	 	
Antigo	0-9	4.0-20		4.5-7.3	0
	9-12 12-19	3.0-15	 	4.5-6.5	0
	19-28	3.0-15	 	4.5-6.5	0
j	28-31	0.0-15	 	4.5-6.5	0
İ	31-33	0.0-15	i	4.5-6.5	0
	33-60	0.0-6.0		4.5-6.5	0
48A:					
Brill	0-7	4.0-20		4.5-7.3	0
	7-11 11-19	3.0-20	 	4.5-6.5	0
	19-34	4.0-25	 	4.5-6.5	0
j	34-38	0.0-15	 	4.5-6.5	0
	38-60	0.0-6.0		4.5-6.5	0
63A:			 	 	
Crystal Lake	0-8	6.0-25		4.5-7.3	0
	8-12	2.0-20		4.5-7.3	0
	12-20 20-32		3.0-25 4.0-25	4.5-6.0	0
	32-60	2.0-15	2.0-25	4.5-7.3	0
63B:		İ	  -	  -	İ
Crystal Lake	0 - 8	6.0-25	 	   4.5-7.3	0
	8-12	2.0-20		4.5-7.3	0
	12-20		3.0-25	4.5-6.0	0
	20-32 32-60	2.0-15	4.0-25   2.0-25	4.5-6.0	0   0
62.0		į	į	į	į
63C: Crystal Lake	0-8	6.0-25	 	   4.5-7.3	0
Ī	8-12	2.0-20	i	4.5-7.3	0
	12-20		3.0-25	4.5-6.0	0
	20-32		4.0-25	4.5-6.0	0
	32-60	2.0-15	2.0-25 	4.5-7.3 	0
63E: Crystal Lake	0-8	   6.0-25	 	   4.5-7.3	0
cryptar name	8-12	2.0-20	 	4.5-7.3	0
i	12-20		3.0-25	4.5-6.0	0
İ	20-32		4.0-25	4.5-6.0	0
	32-60	2.0-15	2.0-25	4.5-7.3	0
64A:					
Totagatic	0-4	150-230	!	4.5-6.5	0   0
	4-8 8-17	1.0-3.0	!	4.5-6.5	1
	17-28	1.0-3.0		4.5-6.5	0
	28-46	1.0-3.0	!	4.5-6.5	0
	46-70	1.0-3.0	!	4.5-6.5	0
	70-80	1.0-3.0	 	4.5-6.5	0
Winterfield	0-7	2.0-15		5.6-7.8	0
	7-60	1.0-5.0		5.6-8.4	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth		Effective   cation-  exchange		Calcium  carbon-
			capacity		
	In	meq/100 g	meq/100 g	pН	Pct
69B: Keweenaw	0-2	3.0-9.0	 	   4.5-6.5	0
reweemaw	2-4	3.0-3.0	 	4.5-6.5	0
	4-16	1.0-9.0		4.5-6.5	0
j	16-20	0.0-15		4.5-6.5	0
	20-27	0.0-15		4.5-6.5	0
	27-43	0.0-15		4.5-6.5	0
	43-75 75-80	0.0-15	 	4.5-6.5   5.1-6.5	0   0
	, , 5 00				
Sayner	0-2	2.0-10		4.5-6.5	0
j	2-4	1.0-6.0		4.5-6.5	0
	4-7		2.0-8.0	4.5-6.0	0
	7-14		2.0-8.0	4.5-6.0	0
	14-22 22-60	0.0-4.0	 	4.5-6.5	0   0
	22-60	0.0-6.0	<del></del>	4.5-0.5	0
Vilas	0-2	2.0-10		4.5-7.3	0
İ	2-4	1.0-6.0		4.5-6.5	0
	4-11	2.0-9.0		4.5-6.5	0
	11-23	0.0-5.0		4.5-6.5	0
	23-32	0.0-3.0		4.5-6.5	0
	32-80	0.0-3.0		4.5-6.5	0
59C:					
Keweenaw	0-2	3.0-9.0		4.5-6.5	0
	2-4	3.0-12		4.5-6.5	0
	4-16	1.0-9.0		4.5-6.5	0
	16-20	0.0-15		4.5-6.5	0
	20-27 27-43	0.0-15	 	4.5-6.5	0   0
	43-75	0.0-15	 	4.5-6.5	0
	75-80	0.0-15		5.1-6.5	0
					į
Sayner	0-2	2.0-10		4.5-6.5	0
	2-4	1.0-6.0		4.5-6.5	0
	4-7		2.0-8.0	4.5-6.0	0
	7-14 14-22	0.0-4.0	2.0-8.0	4.5-6.0	0   0
	22-60	0.0-4.0	 	4.5-6.5	0
Vilas	0-2	2.0-10		4.5-7.3	0
	2-4	1.0-6.0		4.5-6.5	0
	4-11	'		4.5-6.5	0
	11-23 23-32		 	4.5-6.5	0   0
	32-80	1	 	4.5-6.5	0
					į
69E:					
Keweenaw	0-2	3.0-9.0		4.5-6.5	0
	2-4	3.0-12		4.5-6.5	0
	4-16 16-20	1	 	4.5-6.5	0
	20-27	0.0-15	 	4.5-6.5	0
	27-43			4.5-6.5	0
	43-75			4.5-6.5	0
	75-80	0.0-15	i	5.1-6.5	i o

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	capacity	Effective   cation-  exchange  capacity	reaction	Calcium  carbon-   ate
	In	·	meq/100 g		Pct
İ					İ
69E:					
Sayner	0-2 2-4	2.0-10	 	4.5-6.5	0   0
	2-4 4-7	1.0-6.0	2.0-8.0	4.5-6.0	0
	7-14		2.0-8.0	4.5-6.0	0
	14-22	0.0-4.0		4.5-6.5	0
	22-60	0.0-6.0		4.5-6.5	0
****	0.0				
Vilas	0-2	2.0-10		4.5-7.3	0
	2-4 4-11	1.0-6.0	 	4.5-6.5	0   0
	11-23	0.0-5.0	 	4.5-6.5	0
	23-32	0.0-3.0	 	4.5-6.5	0
	32-80	0.0-3.0	 	4.5-6.5	0
	32-80	0.0-3.0	 	4.5-0.5	0
74B:		İ	İ	İ	j
Vilas	0-2	2.0-10		4.5-7.3	0
I	2-4	1.0-6.0		4.5-6.5	0
	4-11	2.0-9.0		4.5-6.5	0
	11-23	0.0-5.0		4.5-6.5	0
	23-32	0.0-3.0		4.5-6.5	0
	32-80	0.0-3.0	 	4.5-6.5	0
74C:					
Vilas	0-2	2.0-10		4.5-7.3	0
	2-4	1.0-6.0		4.5-6.5	0
I	4-11	2.0-9.0		4.5-6.5	0
	11-23	0.0-5.0		4.5-6.5	0
	23-32	0.0-3.0		4.5-6.5	0
	32-80	0.0-3.0	 	4.5-6.5	0
74D:					
Vilas	0-2	2.0-10		4.5-7.3	0
	2-4	1.0-6.0		4.5-6.5	0
I	4-11	2.0-9.0		4.5-6.5	0
	11-23	0.0-5.0		4.5-6.5	0
I	23-32	0.0-3.0		4.5-6.5	0
	32-80	0.0-3.0	 	4.5-6.5	0
100B:			 		
Menahga	0-2	1.0-8.0		4.5-5.5	0
I	2-25		2.0-4.0	4.5-5.5	0
	25-80	0.0-2.0		5.1-7.3	0
100C:			 	 	
Menahga	0-1		80-120	4.5-5.5	0
i	1-2	1.0-8.0		4.5-5.5	0
į	2-25		2.0-4.0	4.5-5.5	0
	25-80	0.0-2.0		5.1-7.3	0
100D:			 	 	
Menahga	0-1		80-120	4.5-5.5	0
-	1-2	1.0-8.0		4.5-5.5	0
i	2-25		2.0-4.0	4.5-5.5	0
	25-90	0.0-2.0		5.1-7.3	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth		Effective   cation-  exchange		Calcium  carbon-
		<u> </u>	capacity	<u> </u>	i
	In	meq/100 g	meq/100 g	PH	Pct
127D:			 	 	
Amery	0-3	3.0-15		4.5-6.5	0
	3-22		1.0-15	4.5-6.0	0
	22-34	1.0-15		5.1-6.5	0
	34-41 41-57	1.0-15	 	5.1-6.5	0
	57-71	1.0-15	 	5.1-6.5	0   0
	71-80	1.0-15		5.6-6.5	0
Rosholt	0-4	3.0-15	 	4.5-7.3	0
ROBIIOTE	4-10	1.0-10	 	4.5-6.5	0
İ	10-14	1.0-10		4.5-6.5	0
j	14-28	1.0-15		4.5-6.5	0
	28-34	1.0-10		4.5-6.5	0
	34-60	0.0-6.0	 	4.5-6.5	0
127E:					į
Amery	0-3	3.0-15		4.5-6.5	0
	3-22 22-34	1.0-15	1.0-15	5.1-6.5	0
	34-41	1.0-15		5.1-6.5	0
	41-57	1.0-15		5.1-6.5	0
İ	57-71	1.0-15		5.1-6.5	0
	71-80	1.0-15		5.6-6.5	0
Rosholt	0 - 4	3.0-15	 	4.5-7.3	0
	4-10	1.0-10		4.5-6.5	0
	10-14	1.0-10		4.5-6.5	0
	14-28 28-34	1.0-15	 	4.5-6.5	0   0
	34-60	0.0-6.0		4.5-6.5	0
156B:			 	 	
Magnor, very stony	0-4		3.0-20	3.5-7.3	0
	4-11		1.0-15	3.5-6.0	0
	11-16		1.0-15	3.5-6.0	0
	16-21		1.0-15	3.5-6.0	0
	21-39 39-58	1.0-15	 	4.5-6.5	0
	58-60	1.0-10		5.1-6.5	0
Magnor	0-8		   3.0-20	   3.5-7.3	0
	8-11		1.0-15	3.5-6.0	0
İ	11-16	i	1.0-15	3.5-6.0	0
	16-21	1	1.0-15	3.5-6.0	
	21-39	1		4.5-6.5	
	39-58 58-60	1	 	4.5-6.5   5.1-6.5	0
157B:			 	 	
Freeon, very stony	0-4		   3.0-20	4.5-6.5	0
	4-19	'		4.5-6.5	0
	19-39			4.5-6.5	0
	39-53 53-80	1.0-10   1.0-10	 	4.5-6.5	0 0
H	0.4				
Freeon	0-4 4-19	1.0-15	3.0-20	3.5-7.3	0   0
	19-39	'	 	4.5-6.5	1
					1
	39-53	1.0-10		4.5-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	cation-		Calcium  carbon-   ate
		:	capacity		
	In	meq/100 g	meq/100 g	рН	Pct
157C: Freeon, very stony	   0-4		   3.0-20	   4.5-6.5	0
Freedi, Very Stony	0-4	1.0-15	3.0-20	4.5-6.5	0
	19-39	1.0-15	 	4.5-6.5	0
	39-53	1.0-10		4.5-6.5	0
	53-80	1.0-10		4.5-6.5	0
Freeon	   0-4		   3.0-20	   3.5-7.3	0
	4-19	1.0-15		4.5-6.5	0
	19-39	1.0-15		4.5-6.5	0
	39-53	1.0-10		4.5-6.5	0
	53-80 	1.0-10	 	4.5-6.5	0
160A:					
Oesterle	0-7	6.0-20		4.5-6.5	0
	7-11	3.0-15		4.5-6.5	0
	11-31   31-60	1.0-10	 	4.5-6.5	0   0
	31-00			4.5-0.5	
182B:	İ	İ	j	İ	j
Padus	0-2	3.0-15		4.5-7.3	0
	2-3	1.0-10		4.5-6.5	0
	3-19	1.0-15	3.0-15	4.5-6.0	0
	19-26   26-38	1.0-15	 	4.5-6.5	0   0
	38-60	0.0-6.0		4.5-6.5	0
182C:			 	 	
Padus	0-2	3.0-15		4.5-7.3	0
	2-3	1.0-10	i	4.5-6.5	0
	3-19		3.0-15	4.5-6.0	0
	19-26	1.0-15		4.5-6.5	0
	26-38	1.0-15		4.5-6.5	0
	38-60 	0.0-6.0	 	4.5-6.5 	0 
192A:			ĺ		į
Worcester	0-2	3.0-20	   3.0-15	4.5-7.3	0
	2-3   3-6		3.0-15	4.5-6.0	0   0
	6-16		3.0-15	4.5-6.0	0
	16-20	2.0-15	i	4.5-6.5	0
	20-32	2.0-15		4.5-6.5	0
		1.0-7.0		4.5-6.5	
	39-60 	0.0-6.0	 	4.5-6.5	0
193A:				 	
Minocqua		120-190		4.5-7.8	0
		2.0-20		4.5-7.8	
		1.0-15		4.5-6.5	:
	28-60 	0.0-6.0	 	4.5-6.5	0
215B:		į	į		į
Pence	0-3   3-8	1		4.5-7.3	0
	3-8   8-15	1	   2.0-15	4.5-7.3	,
		0.0-10	2.0-15	4.5-6.5	,
		0.0-6.0		4.5-6.5	

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	exchange capacity	!		Calcium  carbon-   ate
	In	<u> </u>	meg/100 g	рн	Pct
	111	meq/100 g	meq/100 g 	PH	
215C:					
Pence	0-3 3-8	3.0-15	 	4.5-7.3	0
	8-15		2.0-15	4.5-6.0	0
	15-21	0.0-10		4.5-6.5	0
	21-60	0.0-6.0	i	4.5-6.5	0
215D:			 	 	
Pence	0-3	3.0-15	 	4.5-7.3	0
	3-8	1.0-15		4.5-7.3	0
	8-15	j	2.0-15	4.5-6.0	0
	15-21	0.0-10		4.5-6.5	0
	21-60	0.0-6.0		4.5-6.5	0
315A:			 	 	
Rib	0-7	8.0-35		4.5-7.3	0
	7-10	2.0-15		4.5-7.3	0
	10-32	4.0-25		4.5-7.3	0
	32-35	1.0-20		4.5-7.3	0
	35-37 37-60	0.0-10		4.5-7.3	0
	37-60	0.0-6.0	 	5.5-8.4	0
337A:					
Plover	0-10	5.0-10		4.5-7.3	0
	10-13		2.0-15	4.5-6.5	0
	13-18		2.0-15	4.5-6.5	0
	18-32		2.0-15	4.5-6.5	0
	32-60	1.0-10	 	5.1-6.5	0
368B:				 	
Mahtomedi	0 - 5	2.0-11		5.1-6.5	0
	5-8	0.0-6.0		5.1-6.5	0
	8-15	0.0-6.0		5.1-6.5	0
	15-30 30-60	0.0-6.0	 	5.1-6.5	0
	30-60	0.0-6.0	 	5.1-7.6	0
Cress	0-3	2.0-20		4.5-7.3	0
	3-15	1.0-15		4.5-6.0	0
	15-31		0.0-7.0	4.5-6.0	0
	31-36		0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0	 	4.5-6.5	0
368C:					
Mahtomedi	0-5	2.0-11		5.1-6.5	0
	5-8	0.0-6.0		5.1-6.5	0
	8-15	1		5.1-6.5	0
	15-30 30-60		 	5.1-6.5	0
			!		
Cress	0-3	2.0-20		4.5-7.3	0
	3-15	1.0-15		4.5-6.0	0
	15-31		0.0-7.0	4.5-6.0	0
	31-36 36-60	0.0-6.0	0.0-7.0	4.5-6.0	0
			<u> </u>		
368D:			ļ	ļ	İ
Mahtomedi	0-5	2.0-11		5.1-6.5	0
	5-8	0.0-6.0		5.1-6.5	0
	8-15 15-30	0.0-6.0	 	5.1-6.5	0
	30-60	0.0-6.0	 	5.1-0.5	0
		1	i I	, <u></u>	1

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	capacity	cation- exchange		Calcium  carbon-   ate
	In	·	capacity meq/100 g	рн	Pct
368D:					
Cress	0-3 3-15	2.0-20	 	4.5-7.3	0
	15-31	1.0-15	0.0-7.0	4.5-6.0	0
	31-36		0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0		4.5-6.5	0
371A:					
Croswell	0-1 1-7	2.0-10	   1.0-5.0	4.5-7.3	0
	7-16		1.0-4.0	4.5-7.3	0
	16-39		1.0-3.0	4.5-7.3	0
	39-60	1.0-2.0		5.1-8.4	0
380B: Cress	0.2	2.0-20	 	   4.5-7.3	0
Cress	0-3 3-15	1.0-15	 	4.5-7.3	0
j	15-31		0.0-7.0	4.5-6.0	0
	31-36		0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0		4.5-6.5	0
Rosholt	0-8	3.0-15		4.5-7.3	0
	8-10 10-14	1.0-10	 	4.5-6.5	0
	14-28	1.0-10	 	4.5-6.5	0
	28-34	1.0-10		4.5-6.5	0
j	34-60	0.0-6.0		4.5-6.5	0
380C: Cress	0-3	2.0-20	 	   4.5-7.3	0
Cless	3-15	1.0-15	 	4.5-7.3	0
	15-31		0.0-7.0	4.5-6.0	0
İ	31-36	i	0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0		4.5-6.5	0
Desta 14	0.0	2 0 15			
Rosholt	0-8 8-10	3.0-15	 	4.5-7.3	0
	10-14	1.0-10		4.5-6.5	0
	14-28	1.0-15		4.5-6.5	0
j	28-34	1.0-10		4.5-6.5	0
	34-60	0.0-6.0		4.5-6.5	0
2000.			 	 	
380D: Cress	0-3	2.0-20	 	   4.5-7.3	0
	3-15	1.0-15		4.5-6.0	0
j	15-31		0.0-7.0	4.5-6.0	0
	31-36		0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0		4.5-6.5	0
Rosholt	0-8	3.0-15	l I	   4.5-7.3	0
	8-10			4.5-6.5	0
İ	10-14	1.0-10		4.5-6.5	0
	14-28	1.0-15		4.5-6.5	0
	28-34	1		4.5-6.5	0
	34-60	0.0-6.0		4.5-6.5	0
383B:			 	 	
Mahtomedi	0-5	2.0-11		5.1-6.5	0
	5-8	0.0-6.0		5.1-6.5	0
	8-15	0.0-6.0		5.1-6.5	0
	15-30	0.0-6.0		5.1-6.5	0
	30-60	0.0-6.0	i	5.1-7.8	i o

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	exchange capacity		Soil  reaction 	Calcium  carbon-   ate
	In	<u> </u>	meq/100 g	рн	Pct
383C: Mahtomedi	0-5	2.0-11	 	   5.1-6.5	0
Mantomedi	5-8	0.0-6.0	 	5.1-6.5	0
	8-15	0.0-6.0	l	5.1-6.5	0
	15-30	0.0-6.0		5.1-6.5	0
	30-60	0.0-6.0	i	5.1-7.8	0
383D:					
Mahtomedi	0-5	2.0-11		5.1-6.5	0
	5-8 8-15	0.0-6.0	 	5.1-6.5	0
	15-30	0.0-6.0	 	5.1-6.5	0
	30-60	0.0-6.0	 	5.1-7.8	0
		İ	İ		İ
396B:		İ	İ	İ	į
Friendship	0 - 4		1.0-4.0	4.5-7.3	0
	4-29		1.0-2.0	4.5-6.5	0
	29-60		1.0-2.0	4.5-6.5	0
Wurtsmith	0-6		   2.0-14	   3.5-5.5	0
wurtsmith	6-33		1.0-2.0	3.5-5.5	0
	33-60		1.0-2.0	3.5-0.0	0
	33 00	İ	1.0 2.0	3.3 7.3	
Grayling	0-3	i	2.0-14	3.5-5.5	0
	3-15	j	1.0-4.0	3.5-5.5	0
	15-23	1.0-2.0		5.6-7.3	0
	23-60	1.0-2.0		5.6-7.3	0
397A: Perchlake	0-9	1.0-7.0	 	   4.5-6.5	
Perchiake	9-18	1.0-7.0	 	4.5-6.5	0
	18-42	1.0-4.0	 	4.5-6.5	0
	42-46		2.0-15	4.5-6.5	0
	46-60	0.0-3.0	i	4.5-6.5	0
399B:		!	!		
Grayling	0-3		2.0-14	3.5-5.5	0
	3-15 15-23	1.0-2.0	1.0-4.0	3.5-5.5	0
	23-60	1.0-2.0	 	5.6-7.3	0
	23 00		! 	3.0 7.3	
399C:		İ	İ		i
Grayling	0-3		2.0-14	3.5-5.5	0
	3-15		1.0-4.0	'	0
	15-23	1		5.6-7.3	0
	23-60	1.0-2.0		5.6-7.3	0
399D:		1	 	 	1
Grayling	0-3		2.0-14	3.5-5.5	0
	3-15		1.0-4.0	3.5-5.5	1
	15-23	1.0-2.0	i	5.6-7.3	0
	23-60	1.0-2.0		5.6-7.3	0
405A:					
Lupton	0-65	140-180		5.6-7.8	0
Cathro	0-28	150-230	 	   4.5-7.8	0
	28-49		 	5.6-7.3	5-25
	49-60	'		5.6-7.3	5-25
		j			į
Tawas	0-31	1		4.5-7.8	0
	31-60	1.0-7.0		5.6-8.4	0

Table 25.--Chemical Properties of the Soils--Continued

	capacity		reaction	carbon-
   In	·		рН	Pct
   0-13   13-60	   	   50-100   50-120	3.5-4.4	   0   0
0-80	140-200	   	4.5-7.3	0
0-32	150-230   1.0-3.0	   	4.5-7.8	0 0
0-80	140-200	   	4.5-7.3	0
0-28	150-230		4.5-7.8	0
28-49	2.0-20		•	5-25
49-60	2.0-20	 	5.6-7.3	5-25
İ	İ	İ		İ
1	1			0
4-60	140-160	 	5.6-7.3	0
0-8	150-200		5.6-7.8	0
8-40	150-200		5.6-7.8	0
40-42	2.0-15	 	5.5-7.8	0   0
0-60		50-120	3.5-4.5	0
0-3		4.0-10	3.5-6.5	0
		1		0
35-60		1.0-5.0	3.5-7.3	0   0
		00 100		0
0-1   1-2				0
2-25		2.0-4.0	4.5-5.5	0
25-80	0.0-2.0	 	5.1-7.3	0
İ				
0-3		4.0-10		0
				0
35-60		1.0-5.0	3.5-7.3	0
   0-1		   80-120	4.5-5.5	0
1-2		4.0-10	3.5-6.5	0
2-25	0.0-2.0	2.0-4.0	4.5-5.5	0
İ				
n-3		   4 0-10	   3 = = = =	0
3-22		2.0-4.0	3.5-6.5	0
22-35		1.0-5.0	3.5-7.3	0
35-60		1.0-5.0	3.5-7.3	0
0-1		80-120	4.5-5.5	0
1-2 2-25		4.0-10	3.5-6.5 4.5-5.5	0
	0-13   13-60   0-80   0-80   0-32   32-60   0-80   0-28   28-49   49-60   0-4   4-60   0-8   8-40   40-42   42-60   0-60   0-60   0-1   1-2   2-25   25-80   0-1   1-2   2-25   25-80   0-3   3-22   22-35   35-60   0-1   1-2   2-25   25-80   0-3   0-3   0-3   0-3   0-1   1-2	In   meq/100 g	0-13	

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth		Effective   cation-  exchange		Calcium  carbon-
			capacity	!	
	In	meq/100 g	meq/100 g	pН	Pct
441C:			l I	l I	
Freeon	0-4		3.0-20	   3.5-7.3	0
	4-19	1.0-15		4.5-6.5	0
j	19-39	1.0-15		4.5-6.5	0
	39-53	1.0-10		4.5-6.5	0
	53-80	1.0-10		4.5-6.5	0
Cathro	0-28	150-230	 	4.5-7.8	0
İ	28-49	2.0-20	i	5.6-7.3	5-25
	49-60	2.0-20		5.6-7.3	5-25
442C:			 	 	
Haugen	0 - 4	3.0-17	 	4.5-6.5	0
i	4-15	1.0-15	i	4.5-6.0	0
	15-23	1.0-15		4.5-6.0	0
	23-35	1.0-15		4.5-6.0	0
	35-49	1.0-15		5.6-6.5	0
	49-79 79-80	1.0-15	 	5.6-6.5	0
	79-80	1.0-15	 	5.0-0.5	0 
Greenwood	0-6		80-120	3.5-4.5	0
	6-60		150-200	3.5-4.5	0
443D:			 	 	
Amery	0-3	3.0-15	 	4.5-7.3	0
-	3-22	i	1.0-15	4.5-6.0	0
j	22-34	1.0-15		5.1-6.5	0
	34-41	1.0-15		5.1-6.5	0
	41-57	1.0-15		5.1-6.5	0
	57-71	1.0-15	 	5.1-6.5	0
	71-80	1.0-15	 	5.6-6.5	0 
Greenwood	0 - 6		80-120	3.5-4.5	0
	6-60		150-200	3.5-4.5	0
461A:			 	 	
Bowstring	0-38	140-180		5.6-8.4	0
-	38-47	1.0-3.0	i	5.6-8.4	0
	47-80	140-180		5.6-8.4	0
484A:			 	 	 
Greenwood	0-6		80-120	3.5-4.5	0
	6-60		150-200	3.5-4.5	0
Beseman	0-36		   50-150	   3.5-4.4	   0
Deseman		3.0-15		3.5-7.3	0
495B:					
Karlsborg	0-9	2.0-10	 	4.5-6.5	0
	9-28 28-48	!	 	4.5-6.5	0
		1.0-5.0	 	4.5-6.5	0
		į	į	İ	į
Grettum	0-3		2.0-15	3.5-7.3	0
	3-32	!	1.0-10	3.5-7.3	:
	32-75 75-80		1.0-10	5.1-7.3	0
	13-80	1 1.0-9.0		J.I-/.3	

Table 25.--Chemical Properties of the Soils--Continued

495B: Perida	In	meq/100 g	capacity meq/100 g	   pH 	Pct
	   0-9   9-43   43-45			Hq 	Pct
	9-43	'			1
	9-43	'		I	
	9-43	'		   3.5-7.3	0
				3.5-7.3	0
	45-60	2.0-10		3.5-7.3	0
		12-65		3.5-7.8	0
	60-74	12-65		3.5-7.8	0
	74-80	1.0-9.0		4.5-7.3	0
495C:	 	1	 	 	
Karlsborg	0-9	2.0-10	 	4.5-6.5	0
5	9-28	2.0-10		4.5-6.5	0
	28-48	12-65		4.5-6.5	0
	48-80	1.0-5.0		4.5-6.5	0
Grettum	0-3		2.0-15	3.5-7.3	0
	3-32		1.0-10   1.0-10	3.5-7.3 5.1-7.3	0
	75-80	1.0-9.0		5.1-7.3	0
Perida	0-9	2.0-10		3.5-7.3	0
	9-43	2.0-10		3.5-7.3	0
	43-45	2.0-10		3.5-7.3	0
	45-60	12-65		3.5-7.8	0
	60-74	12-65		3.5-7.8	0
	74-80	1.0-9.0		4.5-7.3	0
495D:	 			 	
Karlsborg	0-9	2.0-10		4.5-6.5	0
-	9-28	2.0-10		4.5-6.5	0
	28-48	12-65		4.5-6.5	0
	48-80	1.0-5.0		4.5-6.5	0
<b></b>					
Grettum	0-3 3-32		2.0-15   1.0-10	3.5-7.3	0
	3-32		1.0-10	5.1-7.3	0
	75-80	1.0-9.0		5.1-7.3	0
		İ			
Perida	0-9	2.0-10		3.5-7.3	0
	9-43	2.0-10		3.5-7.3	0
	43-45	2.0-10		3.5-7.3	0
	45-60	12-65		3.5-7.8	0
	60-74	12-65	 	3.5-7.8	0
	74-80	1.0-9.0	 	4.5-7.3	0
497A:	 	1	 	 	
Meenon	0-9	2.0-10		4.5-7.3	0
	9-28	1.0-10		4.5-7.3	0
	28-41	10-70		3.5-7.8	0
	41-80	0.0-7.0		4.5-6.5	0
E1 E 7 .			  -	  -	
515A: Manitowish	   0-3	3.0-15	 	   4.5-7.3	0
Manit COWISH	3-4	1.0-15	 	4.5-7.3	0
	4-16	!	3.0-15	4.5-6.0	1
	16-19	!		4.5-6.5	0
	19-60			4.5-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-  exchange  capacity		Soil  reaction 	Calcium  carbon-   ate
į		i -	capacity		j
ĺ	In	meq/100 g	meq/100 g	рН	Pct
521A:   Dody	0-3	40-100	 	   4.5-7.3	0
body	3-9	6.0-50	l	4.5-7.3	0
i	9-20	1.0-15		4.5-7.3	0
i	20-23	1.0-15		4.5-7.3	0
İ	23-47	10-65		4.5-6.5	0
I	47-58	1.0-15		4.5-6.5	0
	58-80	1.0-15		4.5-6.5	0
524E:   Rock outcrop.		     	     	     	   
Frogcreek	0 - 4	5.0-20		4.5-7.3	0
į	4-13	i	3.0-15	4.5-6.0	0
I	13-19	1.0-15		5.1-6.5	0
I	19-32	1.0-15		5.1-6.5	0
	32-46	1.0-15		5.1-6.5	0
	46-80	0.0-10		6.1-7.3	0
Metonga	0-3	5.0-20	 	4.5-7.3	0
i	3-4	j	2.0-15	3.6-6.0	0
İ	4-25		3.0-15	3.6-6.0	0
I	25-28	1.0-9.0		5.1-6.5	0
	28-80				0
542B:			 	 	
Haugen, very stony	0 - 4	3.0-17		4.5-6.5	0
İ	4-15	1.0-15		4.5-6.0	0
I	15-23	1.0-15		4.5-6.0	0
	23-35	1.0-15		4.5-6.0	0
	35-49	1.0-15		5.6-6.5	0
ļ	49-79 79-80	1.0-15	 	5.6-6.5	0
l I	79-60	1.0-15	 	3.0-0.5	0
Haugen	0 - 7	3.0-17		4.5-6.5	0
I	7-15	1.0-15		4.5-6.0	0
ļ	15-23	1.0-15		4.5-6.0	0
!	23-35	1.0-15		4.5-6.0	0
ļ	35-49 49-79	1.0-15	 	5.6-6.5	0
ļ	79-80	1.0-15	 	5.6-6.5	0
	73-80	1.0-13	 	3.0-0.3	0
542C:		İ	İ	İ	İ
Haugen, very stony		3.0-17		4.5-6.5	0
!	4-15	1.0-15		4.5-6.0	0
ļ	15-23	1	 	4.5-6.0	0
	23-35 35-49	1	 	5.6-6.5	0
ļ.	49-79	1.0-15	l	5.6-6.5	0
	79-80	1.0-15		5.6-6.5	0
į				ĺ	
Haugen	0-7	3.0-17	 	4.5-6.5	0
	7-15 15-23	1.0-15	 	4.5-6.0	0
	23-35	1	 	4.5-6.0	1
 	35-49	'	 	5.6-6.5	0
	49-79	1.0-15		5.6-6.5	0
		1.0-15	:	5.6-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	exchange	1	Soil  reaction	Calcium
	 	capacity	exchange capacity	 	ate
	In	meq/100 g	meq/100 g	pH	Pct
543B:			 	 	
Anigon	   0-10	4.0-20	 	4.5-7.3	0
J	10-14	3.0-20		4.5-6.5	0
j	14-20	4.0-25		4.5-6.5	0
	20-30	4.0-25		4.5-6.5	0
	30-34	1.0-15	 	4.5-6.5	0
	34-60 	0.0-6.0	 	4.5-6.5 	0
543C2:		! 	! 	! 	
Anigon	0-10	4.0-20		4.5-7.3	0
	10-14	3.0-20		4.5-6.5	0
	14-20	4.0-25		4.5-6.5	0
	20-30	4.0-25		4.5-6.5	0
	30-34 34-60	1.0-15	 	4.5-6.5	0
	34-00 	0.0-8.0	 	4.5-6.5	0
544F:		! 	! 	! 	
Menahga	0-1	j	80-120	4.5-5.5	0
	1-2	1.0-8.0		4.5-5.5	0
	2-25		2.0-4.0	4.5-5.5	0
	25-80	0.0-2.0		5.1-7.3	0
Mahtomedi	   0-5	2.0-11	 	   5.1-6.5	   0
Maircomedi	5-8	0.0-6.0		5.1-6.5	0
	8-15	0.0-6.0		5.1-6.5	0
İ	15-30	0.0-6.0		5.1-6.5	0
	30-60	0.0-6.0		5.1-7.8	0
FFF3					
555A: Fordum	   0-6	10-45	l I	   4.5-8.4	   0
ror dam	6-18	3.0-20		4.5-8.4	0
	18-30	3.0-20		4.5-8.4	0
İ	30-60	2.0-6.0		5.6-8.4	0
		!			
574B:					
Sayner	0-2   2-4	2.0-10	 	4.5-6.5	0
	4-7		2.0-8.0	4.5-6.0	0
	7-14		2.0-8.0	4.5-6.0	0
İ	14-22	0.0-4.0		4.5-6.5	0
	22-60	0.0-6.0		4.5-6.5	0
5546					
574C: Sayner	   0-2	2.0-10	 	   4.5-6.5	0
bayner	2-4	1.0-6.0		4.5-6.5	0
	4-7		2.0-8.0	4.5-6.0	0
	7-14	j	2.0-8.0	4.5-6.0	0
	14-22	0.0-4.0		4.5-6.5	0
	22-60	0.0-6.0		4.5-6.5	0
574E:	 		 	 	
Sayner	   0-2	2.0-10	 	   4.5-6.5	0
1	2-4	1.0-6.0		4.5-6.5	0
	4-7		2.0-8.0	4.5-6.0	0
	7-14		2.0-8.0	4.5-6.0	0
	14-22	0.0-4.0		4.5-6.5	0
	22-60	0.0-6.0		4.5-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth 	Cation- exchange capacity	cation-		Calcium  carbon-   ate
	In	meq/100 g	meq/100 g	pН	Pct
		į			İ
579B:		2 0 15	 		
Parkfalls	0-5   5-8	3.0-15	2.0-15	4.5-6.5	0   0
	8-17		2.0-15	4.5-6.5	0
	17-30	1.0-15		4.5-6.5	0
	30-33	1.0-15	i	4.5-6.5	0
	33-48	2.0-15		4.5-6.5	0
	48-80	1.0-15		5.6-7.3	0
600A: Haplosaprists.		     	     	     	     
Psammaquents.	 	į i	  -	 	i i
615B:	İ	İ			į
Cress	0-3	2.0-20		4.5-7.3	0
	3-15	1.0-15		4.5-6.0	0
	15-31   31-36		0.0-7.0	4.5-6.0	0   0
	36-60	0.0-6.0	0.0-7.0	4.5-6.5	0
			! 		
615C:	İ	İ	İ	İ	į
Cress	0-3	2.0-20		4.5-7.3	0
	3-15	1.0-15		4.5-6.0	0
	15-31		0.0-7.0	4.5-6.0	0
	31-36 36-60	0.0-6.0	0.0-7.0	4.5-6.0	0   0
	30-00			4.5-0.5	
615D:		İ	ĺ		İ
Cress	0-3	2.0-20		4.5-7.3	0
	3-15	1.0-15	   0.0-7.0	4.5-6.0	0   0
	15-31   31-36		0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0		4.5-6.5	0
		į	į		į
623A:		100 155			
Capitola	0-5   5-7	100-155   8.0-35	 	4.5-7.3	0   0
	7-22	3.0-15	 	4.5-7.3	0
	22-33	2.0-15		4.5-7.3	0
	33-60	1.0-10	i	5.1-7.8	0
624A:					
Ossmer	0-4   4-6	6.0-20   1.0-15	 	4.5-7.3	0   0
	6-11			4.5-6.5	1
	11-26	1.0-15		4.5-6.5	0
	26-34	1.0-15	i	4.5-6.5	0
	34-38	1.0-15		4.5-6.5	0
	38-60	0.0-6.0	 	4.5-6.5	0
632A:			 	! 	
Aftad	0-10	3.0-10		4.5-7.3	0
	10-29	!		4.5-6.5	0
	29-36	2.0-15		4.5-6.5	0
	36-41   41-60		 	4.5-6.5   5.1-6.5	0   0
	1	1 1.0-10	ı	0.3	0

Table 25.--Chemical Properties of the Soils--Continued

   	!	!	reaction	carbon-
In	meg/100 g		pH	Pct
į		İ	j -	į
0-10	3.0-10		4.5-7.3	0
10-29	1			0
	1	!		0
!	'	!		0
41-60	1.0-10		2.1-0.2	0
l I		 	 	 
0-10	3.0-10		4.5-7.3	0
10-29	2.0-10		4.5-6.5	0
29-36	2.0-15		4.5-6.5	0
36-41	2.0-15		4.5-6.5	0
41-60	1.0-10		5.1-6.5	0
   0-3	3 0-15	 	   45_73	   0
!	1	!		0
!		!		0
15-21	0.0-10		4.5-6.5	0
21-60	0.0-6.0		4.5-6.5	0
j	j	İ	j	į
0-2	3.0-15		4.5-7.3	0
2-3	1.0-10		4.5-6.5	0
3-19	1	3.0-15		0
!	1			0
!	'	!		0
38-60	0.0-6.0		4.5-6.5	0
l I	l l	 	 	 
0-4	8.3-13	 	4.5-7.3	0
	1			0
5-10	4.6-12		4.5-6.5	0
10-18	4.6-12	i	4.5-6.5	0
18-27	4.6-12		4.5-6.5	0
27-34	5.5-14		4.5-6.5	0
34-38	4.8-12		4.5-6.5	0
38-60	1.0-5.5		4.5-6.5	0
   0-2	3 0-15	l 	   45-65	0
!	1	!		0
!	1	!		0
		i		0
27-43	0.0-15	i	4.5-6.5	0
43-75	0.0-15		4.5-6.5	0
75-80	0.0-15		5.1-6.5	0
0.3	2 0 15	 		
!	'	   <b>-</b>		0   0
	1			0
	'	2.0-15		0
	'	 	4.5-6.5	0
	0-10   10-29   29-36   36-41   41-60   0-10   10-29   29-36   36-41   41-60   0-3   3-8   8-15   15-21   21-60   0-2   2-3   3-19   19-26   26-38   38-60   0-4   4-5   5-10   10-18   18-27   27-34   34-38   38-60   0-2   2-4   4-16   16-20   0-2   27-43   34-38   38-60   0-2   27-43   43-75   75-80   0-3   3-8   8-15	capacity	capacity   exchange   capacity     In   meq/100 g   meq/100 g     0-10   3.0-10       10-29   2.0-10       29-36   2.0-15       41-60   1.0-10       10-29   2.0-10       10-29   2.0-10       29-36   2.0-15       29-36   2.0-15       36-41   2.0-15       29-36   2.0-15       36-41   2.0-15       36-41   2.0-15       41-60   1.0-10       0-3   3.0-15       38-81   1.0-15       15-21   0.0-10       0-2   3.0-15       21-60   0.0-6.0       0-2   3.0-15       26-38   1.0-15       26-38   1.0-15       19-26   1.0-15       26-38   1.0-15       10-18   4.6-12       10-18   4.6-12       10-18   4.6-12       10-2   3.0-15       27-34   5.5-14       34-38   4.8-12       34-38   4.8-12       27-43   0.0-15       27-43   0.0-15       27-43   0.0-15       27-43   0.0-15       27-43   0.0-15       27-43   0.0-15       3-8   1.0-15       15-21   0.0-10	capacity   exchange   capacity     In

Table 25.--Chemical Properties of the Soils--Continued

Map symbol	Depth	,	Effective		Calcium
and soil name		,	cation-	reaction	carbon-
		capacity	exchange capacity	 	ate
	In	meg/100 g	meg/100 g	pH	Pct
	İ		İ	į -	į
670E:					
Keweenaw	0-2 2-4	3.0-15	 	4.5-6.5	0   0
	2-4   4-16	1.0-9.0	 	4.5-6.5	0
	16-20	0.0-15		4.5-6.5	0
İ	20-27	0.0-15	i	4.5-6.5	0
İ	27-43	0.0-15		4.5-6.5	0
	43-75	0.0-15		4.5-6.5	0
	75-80	0.0-15		5.1-6.5	0
Pence	   0-3	3.0-15	 	4.5-7.3	0
	3-8	1.0-15		4.5-7.3	0
j	8-15		2.0-15	4.5-6.0	0
	15-21	0.0-10		4.5-6.5	0
	21-60	0.0-6.0		4.5-6.5	0
671B:			 	 	1
Spoonerhill, stony	0-3	2.0-15		4.5-7.3	0
	3-12	0.0-15	i	4.5-6.5	0
	12-16	0.0-15		4.5-6.5	0
	16-34	0.0-15		5.1-6.5	0
	34-46	0.0-15		5.6-6.5	0
	46-80	0.0-15	 	5.6-6.5	0
Spoonerhill	0-3	2.0-15	 	4.5-7.3	0
	3-12	0.0-15	i	4.5-6.5	0
	12-16	0.0-15		4.5-6.5	0
	16-34	0.0-15		5.1-6.5	0
	34-46	0.0-15		5.6-6.5	0
	46-80	0.0-15	 	5.6-6.5	0
680B:					
Stanberry, stony	0-1	60-160	i	4.5-6.5	0
	1-3	4.0-10		4.5-6.5	0
	3-19	4.0-11		4.5-6.5	0
	19-24	4.0-9.0		4.5-6.5	0
	24-32 32-42	5.0-10	 	4.5-6.5	0   0
	42-80	1.0-6.0	 	5.6-7.3	0
					į
Pence, stony	0-3	3.0-15		4.5-7.3	0
	3-8	1.0-15		4.5-7.3	0
	8-15		2.0-15	4.5-6.0	
	15-21	0.0-10	 	4.5-6.5	0
	21 00				
683A:	ĺ	İ	İ	İ	İ
Tipler	0-3	5.0-15		4.5-7.3	0
	3-5	4.0-10		4.5-6.5	0
	5-19   19-26		2.0-15	4.5-6.0   5.1-6.5	1
		1.0-15	 	5.1-6.5	
	33-60	1		4.5-6.5	0
		İ	İ	İ	İ
706A:					
Winterfield	0-7   7-60	2.0-15	 	5.6-7.8	0   0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-  exchange  capacity	exchange	Soil  reaction 	Calcium  carbon-   ate
	In	  meg/100 g	meq/100 g	рн	Pct
706A:		į	j	j	İ
Totagatic	0 - 4	3.0-10		5.1-6.5	0
	4-8	1.0-3.0		4.5-6.5	0
	8-17	1.0-3.0		4.5-6.5	0
	17-28 28-46	1.0-3.0	 	4.5-6.5	0
	46-70	1.0-3.0	l	4.5-6.5	0
	70-80	1.0-3.0		4.5-6.5	0
İ			ĺ	ĺ	İ
724A:		!	!		
Rib	0-7	8.0-35		4.5-7.3	0
	7-10	2.0-15		4.5-7.3	0
	10-32 32-35	1.0-25	 	4.5-7.3	0
	35-37	0.0-10	 	4.5-7.3	0
	37-60	0.0-6.0		5.5-8.4	0
İ					
Rock outcrop.			 	 	 
726B:		İ	j	j	į
Sissabagama	0-10		2.0-15	4.5-7.3	0
I	10-31		1.0-10	4.5-6.5	0
	31-45	2.0-4.0		4.5-6.5	0
	45-80	2.0-4.0	 	5.1-7.3	0
733A:			 	 	
Wozny	0-3	100-155		4.5-7.3	0
	3-17	8.0-35		4.5-7.3	0
	17-37	3.0-15		4.5-7.3	0
	37-56 56-80	2.0-15	 	5.1-7.3	0
	30-80	0.0-10	 	3.1-0.3	0
771A:		İ		! 	İ
Lenroot	0 - 4	2.0-11	i	5.1-6.5	0
I	4-8	0.0-6.0		5.1-6.5	0
	8-14	0.0-6.0		5.1-6.5	0
	14-21	0.0-6.0		5.1-6.5	0
	21-80	0.0-6.0		5.1-7.3	0
827A:		1	 	 	
Scoba	0 - 9	5.0-20	 	4.5-7.3	0
	9-16	1.0-15		4.5-6.5	0
i	16-20		i	4.5-6.5	0
İ	20-26	2.0-15	i	4.5-6.5	0
I	26-31	0.0-10		4.5-6.5	0
	31-60	0.0-6.0		4.5-6.5	0
853C:			 	 	
Frogcreek	0 - 4	5.0-20		4.5-7.3	0
I	4-13		3.0-15	4.5-6.0	0
I	13-19	'		5.1-6.5	0
	19-32	1.0-15		5.1-6.5	0
	32-46	1.0-15		5.1-6.5	0
	46-80	0.0-10		6.1-7.3	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-  exchange  capacity		'	Calcium  carbon-   ate
	In	  meg/100 g	meg/100 g	рН	Pct
853C:					
Stinnett	0 - 4	6.0-20		4.5-7.3	0
	4-7		3.0-15	4.5-6.0	0
	7-18		3.0-15	4.5-6.0	0
	18-29 29-34		3.0-15	4.5-6.0	0
	34-41	1.0-10	 	4.5-6.5	0
	41-55	0.0-10	 	5.6-7.3	0
	55-80	0.0-15	l	5.6-7.3	0
i			i I		
Wozny	0-3	100-155		4.5-7.3	0
	3-17	8.0-35		4.5-7.3	0
	17-37	3.0-15	i	4.5-7.3	0
	37-56	2.0-15		5.1-7.3	0
	56-80	0.0-10		5.1-6.5	0
856B:					
Stinnett	0-4	6.0-20		4.5-7.3	0
	4-7		3.0-15	4.5-6.0	0
	7-18 18-29		3.0-15	4.5-6.0	0
	29-34	1.0-10	3.0-15	4.5-6.5	0
	34-41	1.0-10	l	4.5-6.5	0
i	41-55	0.0-10		5.6-7.3	0
	55-80	0.0-15		5.6-7.3	0
İ		İ	İ		i
857B:		İ	ĺ		İ
Frogcreek	0 - 4	5.0-20		4.5-7.3	0
	4-13		3.0-15	4.5-6.0	0
	13-19	1.0-15		5.1-6.5	
	19-32	1.0-15		5.1-6.5	0
	32-46	1.0-15		5.1-6.5	0
	46-80	0.0-10		6.1-7.3	0
857C:		1	l I	l I	
Frogcreek	0-4	5.0-20	 	   4.5-7.3	0
FIOGCIEEK	4-13		3.0-15	4.5-6.0	0
	13-19	1.0-15		5.1-6.5	0
	19-32	1.0-15		5.1-6.5	0
İ	32-46	1.0-15		5.1-6.5	0
	46-80	0.0-10	i	6.1-7.3	0
873B:					
Stanberry	0-1	60-160		4.5-6.5	0
	1-3	4.0-10		4.5-6.5	0
	3-19	4.0-11		4.5-6.5	0
	19-24	1	!	4.5-6.5	0
	24-32	5.0-10   3.0-6.0	 	4.5-6.5	!
	32-42 42-80	1.0-6.0	 	5.6-7.3	0
	±4-8U	1.0-0.0	ı I	J.0-/.3 	0
873C:			! 	! 	
Stanberry	0-1	60-160	 	4.5-6.5	0
<u>-</u>	1-3	4.0-10		4.5-6.5	0
		4.0-11		4.5-6.5	0
	19-24	1		4.5-6.5	
	24-32	5.0-10	i	4.5-6.5	0
	32-42	3.0-6.0		4.5-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth		Effective   cation-  exchange		Calcium  carbon-
			capacity		400
	In	meq/100 g	meq/100 g	рН	Pct
873D: Stanberry	0-1	   60-160	 	   4.5-6.5	0
scamperly	1-3	4.0-10	 	4.5-6.5	0
	3-19	4.0-11		4.5-6.5	0
i	19-24	4.0-9.0	i	4.5-6.5	0
I	24-32	5.0-10		4.5-6.5	0
	32-42	3.0-6.0		4.5-6.5	0
	42-80	1.0-6.0		5.6-7.3	0
905A:			 	 	
Cublake	0-3	1.0-8.0		4.5-6.5	0
i	3 - 4	j	0.0-10	3.5-6.0	0
I	4-23		2.0-10	3.5-6.0	0
	23-32		0.0-5.0	3.1-7.3	0
	32-40 40-48		0.0-5.0	3.1-7.3	0
	48-60	2.0-20	0.0-5.0	3.1-7.3	0   0
	10 00	2.0 20	! 	3.1 7.3	
926A:		İ	j		į
Flink	0-3	1.0-8.0		4.5-6.5	0
	3-6		2.0-10	3.5-6.0	0
	6-9 9-26		2.0-10	3.5-6.0	0
	26-35	0.0-3.0	2.0-10	5.1-7.3	0   0
	35-46	0.0-3.0		5.1-7.3	0
i	46-52	2.0-20		5.1-7.3	0
	52-80	2.0-20		5.1-7.3	0
943D:					
Stanberry	0-1	60-160	 	   4.5-6.5	0
beamberry	1-3	4.0-10	 	4.5-6.5	0
i	3-19	4.0-11	i	4.5-6.5	0
İ	19-24	4.0-9.0		4.5-6.5	0
	24-32	5.0-10		4.5-6.5	0
	32-42	3.0-6.0		4.5-6.5	0
	42-80	1.0-6.0	 	5.6-7.3	0
Greenwood	0-6		80-120	3.5-4.5	0
	6-60		150-200	3.5-4.5	0
948A:					
Billyboy	0 <b>- 4</b>	6.0-20 1.0-15	 	4.5-7.3	0
		1.0-15	 	4.5-6.5	
		2.0-15		4.5-6.5	,
i	26-30	2.0-15	i	4.5-6.5	0
I	30-35	2.0-10		4.5-6.5	0
	35-60	0.0-6.0		4.5-6.5	0
970C:			 	 	
Keweenaw	0-2	3.0-15	 	   4.5-6.5	0
	2-4	3.0-12		4.5-6.5	0
j	4-16	1.0-9.0	i	4.5-6.5	0
İ		0.0-15		4.5-6.5	
		0.0-15		4.5-6.5	:
	27-43	!		4.5-6.5	0
	43-75 75-80		 	4.5-6.5   5.1-6.5	0
	, 5-00	1 0.0-13	 I	0.3	0

Table 25.--Chemical Properties of the Soils--Continued

0-3 3-8 8-15 5-21 21-60 0-6 6-60	·	capacity meq/100 g	4.5-7.3 4.5-7.3 4.5-6.0 4.5-6.5 4.5-6.5	ate     Pct
0-3 3-8 8-15 25-21 21-60 0-6 6-60	meq/100 g     3.0-15   1.0-15     0.0-10   0.0-6.0	meq/100 g	4.5-7.3 4.5-7.3 4.5-6.0 4.5-6.5 4.5-6.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3-8 8-15 15-21 21-60 0-6 6-60	1.0-15     0.0-10   0.0-6.0 	   2.0-15       80-120	4.5-7.3 4.5-6.0 4.5-6.5 4.5-6.5	0 0 0 0 0
3-8 8-15 15-21 21-60 0-6 6-60	1.0-15     0.0-10   0.0-6.0 	   2.0-15       80-120	4.5-7.3 4.5-6.0 4.5-6.5 4.5-6.5	0 0 0 0 0
3-8 8-15 15-21 21-60 0-6 6-60	1.0-15     0.0-10   0.0-6.0 	   2.0-15       80-120	4.5-7.3 4.5-6.0 4.5-6.5 4.5-6.5	0 0 0 0 0
0-6 6-60 0-2 2-4	   0.0-10   0.0-6.0 	       80-120	4.5-6.0 4.5-6.5 4.5-6.5 3.5-4.5	0 0
0-6 6-60 0-2 2-4	0.0-6.0	     80-120	4.5-6.5	0
0-6 6-60 0-2 2-4		80-120	3.5-4.5	
6-60 0-2 2-4	!	!	!	   n
0-2 2-4	   	150-200		
2-4			3.5-4.5	0
2-4		 	 	
	3.0-15	 	   4.5-6.5	0
4-16	3.0-12		4.5-6.5	0
	1.0-9.0		4.5-6.5	0
L6-20	0.0-15		4.5-6.5	0
20-27	0.0-15		4.5-6.5	0
27-43	0.0-15		4.5-6.5	0
13-75	0.0-15		4.5-6.5	0
75-80	0.0-15	 	5.1-6.5 	0 
0-3	3.0-15		4.5-7.3	0
3-8	1.0-15		4.5-7.3	0
8-15		2.0-15	4.5-6.0	0
15-21	0.0-10		4.5-6.5	0
21-60	0.0-6.0	 	4.5-6.5 	0 
0 - 6		80-120	3.5-4.5	0
6-60		150-200	3.5-4.5	0
0-5	3.0-15		4.5-7.3	0
5-33	2.0-10		4.5-6.5	0
33-37	1.0-10		4.5-6.5	0
37-45	1.0-10		4.5-6.5	0
15-70	1.0-10		5.6-6.5	0
0-80	1.0-10	 	3.0-0.5	0
0-3	2.0-20		4.5-7.3	0
3-15			4.5-6.0	0
	!	!	!	0
	!		1	0
0-00			4.5-0.5	
		!		0
		!	1	0
		!		0
	1.0-10	 	5.6-6.5	0
	1.0-10		5.6-6.5	0
0 3				
	1	!		0   0
	:	1		0
		0.0-7.0	4.5-6.0	0
	!		4.5-6.5	0
	0-3 3-15 15-31 31-36 36-60 0-5 5-33 33-37 37-45 15-70 70-80 0-3 3-15 15-31	0-80		0-80         1.0-10          5.6-6.5           0-3         2.0-20          4.5-7.3           3-15         1.0-15          4.5-6.0           1.5-31          0.0-7.0         4.5-6.0           31-36          0.0-7.0         4.5-6.0           36-60         0.0-6.0          4.5-6.5           5-33         2.0-10          4.5-6.5           33-37         1.0-10          4.5-6.5           37-45         1.0-10          4.5-6.5           45-70         1.0-10          5.6-6.5           70-80         1.0-10          4.5-7.3           3-15         1.0-15          4.5-6.0           35-31          0.0-7.0         4.5-6.0           0-3         2.0-20          4.5-6.0           35-31          0.0-7.0         4.5-6.0

Table 25.--Chemical Properties of the Soils--Continued

			<u> </u>	<u> </u>	1
Map symbol and soil name	Depth	1	Effective		Calcium
and soll name		exchange capacity	exchange	reaction 	carbon-
	In	  meq/100 g	capacity meq/100 g	pH	Pct
10000		İ			İ
1080B: Spoonerhill	0-3	2.0-15	 	   4.5-7.3	0
	3-12	0.0-15		4.5-6.5	0
İ	12-16	0.0-15	i	4.5-6.5	0
	16-34	0.0-15		5.1-6.5	0
	34-46	0.0-15		5.6-6.5	0
	46-80	0.0-15	 	5.6-6.5	0
Spoonerhill, stony	0-3	2.0-15		4.5-7.3	0
	3-12	0.0-15		4.5-6.5	0
	12-16	0.0-15		4.5-6.5	0
	16-34	0.0-15		5.1-6.5	0
	34-46 46-80	0.0-15	 	5.6-6.5	0
	40-00	0.0-15	 	5.0-0.5	0
Cress	0-3	2.0-20		4.5-7.3	0
	3-15	1.0-15		4.5-6.0	0
	15-31		0.0-7.0	4.5-6.0	0
	31-36		0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0	 	4.5-6.5	0
1653C:					İ
Stanberry	0-1	60-160		4.5-6.5	0
	1-3	4.0-10		4.5-6.5	0
	3-19	4.0-11		4.5-6.5	0
	19-24	4.0-9.0   5.0-10	 	4.5-6.5	0
	24-32 32-42	3.0-6.0	 	4.5-6.5	0
	42-80	1.0-6.0		5.6-7.3	0
			ĺ	ĺ	İ
Parkfalls	0-5 5-8	3.0-15	   2.0-15	4.5-6.5	0
	8-17		2.0-15	4.5-6.5	0
	17-30	1.0-15		4.5-6.5	0
İ	30-33	1.0-15	i	4.5-6.5	0
j	33-48	2.0-15		4.5-6.5	0
	48-80	1.0-15		5.6-7.3	0
Wozny	0-3	100-155	 	4.5-7.3	0
-	3-17	8.0-35	i	4.5-7.3	0
j	17-37	3.0-15		4.5-7.3	0
	37-56	2.0-15		5.1-7.3	0
	56-80	0.0-10		5.1-6.5	0
2015.			 		
Pits		İ	İ	İ	İ
2050.					
Landfill			 	 	
					į
3011A:					
Barronett	0-9 9-16	7.0-30	 	4.5-7.3	0
		1.0-15	 	4.5-6.5	0
	34-60	1	2.0-25	5.1-7.3	0
21052					
3125A: Meehan	0-5		   2.0-15	   3.5-7.3	0
	5-8		1.0-8.0		0
j	8-28		1.0-8.0		0
	28-60		0.0-4.0	3.5-7.3	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	1	Effective cation- exchange		Calcium
			capacity		
	In	meq/100 g	meq/100 g	рН	Pct
3126A:			 		
Wurtsmith	   0-9		2.0-14	3.5-5.5	0
	9-37		1.0-2.0	3.5-6.0	0
	37-60		1.0-2.0	3.5-7.3	0
3276A:	 		 	 	
Au Gres	0-2		80-120	4.5-7.3	0
	2-5		2.0-5.0	3.5-7.3	0
	5-8	i	2.0-5.0	4.5-6.0	0
	8-16		2.0-5.0	4.5-6.5	0
	16-28		2.0-5.0	3.5-7.3	0
	28-60 	1.0-2.0	 	4.5-7.3	0
3312B:					
Glendenning, very					
stony	0-5	3.0-17	 	5.1-7.3	0
	5-15   15-20	1.0-15	 	5.1-6.0   5.1-6.5	0   0
	20-26	1.0-15	 	5.1-6.5	0
	26-40	1.0-15	 	5.1-6.5	0
	40-65	1.0-15		5.1-6.5	0
	65-80	1.0-15	i	6.1-7.3	0
G1 1 1					
Glendenning	0-7   7-15	3.0-17 1.0-15	 	5.1-7.3	0   0
	15-20	1.0-15	 	5.1-6.5	0
	20-26	1.0-15	l	5.1-6.5	0
	26-40	1.0-15		5.1-6.5	0
	40-65	1.0-15	i	5.1-6.5	0
	65-80	1.0-15		6.1-7.3	0
3336A:	 		 	 	
Fenander	   0-9	5.0-10	 	5.1-7.3	0
	9-15	2.0-15	i	5.1-7.3	0
	15-27	2.0-15		5.1-7.3	0
	27-33	2.0-15		5.1-7.3	0
	33-80	2.0-20		5.1-7.3	0
3403A:	 		 	 	
Loxley	0-13	i	50-100	3.5-4.4	0
	13-60		50-120	3.5-4.4	0
Beseman	   0-36		   50-150	   3.5-4.4	   0
Debendii		3.0-15		3.5-7.3	
	ĺ	İ	İ	ĺ	İ
Dawson	0-8	1		3.5-4.4	•
	8-38	1	150-230		1
		10-25	 	3.5-4.4	
	10-00				
3424C:					
Frogcreek	0-4	5.0-20		4.5-7.3	'
	4-13	1		4.5-6.0	
		1.0-15	 	5.1-6.5	
		1.0-15	 	5.1-6.5	1
		0.0-10		6.1-7.3	0
	İ		İ		İ

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	exchange capacity			Calcium  carbon-   ate
		<u> </u>	capacity		   D=t
	In	meq/100 g	meq/100 g	pH 	Pct
3424C:			! 		
Magroc	0-2	3.0-20	i	4.5-7.3	0
İ	2-11	1.0-15		4.5-6.5	0
	11-22	1.0-15		4.5-6.5	0
	22-30	1.0-15		4.5-6.5	0
	30-45	0.0-15		5.1-7.3	0
	45-50 50-80	0.0-15	 	5.1-7.3	0   0
	30-60		 	 	0
Stinnett	0-4	6.0-20	 	4.5-7.3	0
	4-7		3.0-15	4.5-6.0	0
i	7-18		3.0-15	4.5-6.0	0
İ	18-29		3.0-15	4.5-6.0	0
I	29-34	1.0-10		4.5-6.5	0
	34-41	1.0-10		4.5-6.5	0
	41-55	0.0-10		5.6-7.3	0
	55-80	0.0-15		5.6-7.3	0
Rock outcrop.			 	 	 
Rock odderop.					
3446A:		j	j	İ	į
Newson	0-3		60-155	3.5-6.0	0
	3-8		1.0-7.0	3.5-6.0	0
	8-16		1.0-7.0	3.5-6.0	0
	16-22 22-60		1.0-7.0	3.5-6.0	0
	22-60	0.0-4.0	 	<b>4.</b> 5-6.5 	0
3448B:				 	
Grettum	0-3		2.0-15	3.5-7.3	0
İ	3-32		1.0-10	3.5-7.3	0
I	32-75		1.0-10	5.1-7.3	0
	75-80	1.0-9.0		5.1-7.3	0
3448C:			 		
Grettum	0-3		2.0-15	3.5-7.3	0
ore count	3-32		1.0-10	3.5-7.3	0
	32-75		1.0-10	5.1-7.3	0
	75-80	1.0-9.0		5.1-7.3	0
I					
3516A:			!		
Slimlake	0-6	3.0-15		5.1-6.5	0
	6-17		3.0-15	5.1-6.5	0
		0.0-2.0	 	5.1-6.5   5.1-6.5	:
	53-80	'	l	5.1-6.5	0
i					
3629B:		j	j	İ	į
Perida	0 - 9	2.0-10		3.5-7.3	0
		2.0-10		3.5-7.3	0
		2.0-10		3.5-7.3	0
	45-60	1		3.5-7.8	:
	60-74 74-80	1	 	3.5-7.8	0   0
	00				
M-W. Miscellaneous water		 	 	 	;   
w.		İ	į		į
Water					1

Table 26. -- Soil Moisture Status by Depth

(Depths of layers are in feet. Absence of an entry indicates that the feature is not a concern or that data were not estimated. See terms used in this table)

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October
3A: Totagatic	A/D	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7:	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7:	0.0-1.5: Moist 1.5-6.7:	0.0-0.5: Moist 0.5-6.7:
Bowstring	A/D	0.0-2.0: Moist 2.0-6.7:	0.0-2.5:   Moist   2.5-6.7:   Wet	0.0-1.0: Moist 1.0-6.7:	0.0-6.7: Wet	0.0-6.7:   Wet	0.0-1.0:   Moist   1.0-6.7:   Wet	0.0-2.0: Moist 2.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-1.5:   Moist   1.5-6.7:   Wet	0.0-0.5: Moist 0.5-6.7:
Ausable	A/D	0.0-2.0: Moist 2.0-6.7:	0.0-2.5:   Moist  2.5-6.7:   Wet	0.0-1.0: Moist 1.0-6.7:	0.0-6.7: Wet	0.0-6.7:   Wet 	0.0-1.0:   Moist   1.0-6.7:   Wet	0.0-2.0:   Moist  2.0-6.7:   Wet	0.0-2.5:   Moist   2.5-6.7:   Wet	0.0-1.5:   Moist   1.5-6.7:   Wet	0.0-0.5: Moist 0.5-6.7:
22A: Comstock	υ	0.0-2.5: Moist 2.5-3.0: Wet 3.0-6.7: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist	0.0-2.5: Moist 2.5-5.0: Wet 5.0-6.7:	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-2.0: Moist 2.0-2.5: Wet Wet Moist 5.0-6.7:
24A: Poskin	υ	0.0-3.0: Moist 3.0-6.7: Wet	0.0-4.0: Moist 4.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0:   Moist   1.0-6.7:   Wet	0.0-2.5: Moist 2.5-6.7:	0.0-3.5: Moist 3.5-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-3.0: Moist 3.0-6.7:	Met   0.0-2.0:   Moist   2.0-6.7:   Wet
27A: Scott Lake	м	0.0-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-2.5: Moist 2.5-6.7: Wet	0.0-3.0:   Moist  3.0-6.7:   Wet	0.0-4.5: Moist 4.5-6.7:	0.0-5.0: Moist 5.0-6.7: Wet	0.0-5.5: Moist 5.5-6.7:	0.0-4.5: Moist 4.5-6.7:	0.0-4.0: Moist 4.0-6.7: Wet

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October
28B: Haugen, very stony	υ	0.0-6.7: Moist 	0.0-6.7: Moist	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7:	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7:	0.0-3.0: Moist 3.0-6.0: Wet 6.0-6.7: Moist	0.0-4.5: Moist 4.5-6.0: Wet 6.0-6.7:	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist	0.0-6.7: Moist 
Haugen	υ 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7: Moist	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7:	0.0-3.0: Moist 3.0-6.0: Wet 6.0-6.7:	0.0-4.5: Moist 4.5-6.0: Wet 6.0-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Rosholt, very stony	— — — — п	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Rosholt	м м	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist  0.0-2.0: Moist 2.0-6.0:	0.0-6.7: Moist 0.0-2.0: Moist 2.0-6.0:	0.0-6.7: Moist Moist 0.0-3.0: Moist 3.0-6.0:	0.0-6.7: Moist 0.0-4.5: Moist 4.5-6.0:	0.0-6.7: Moist  0.0-6.7: Moist	0.0-6.7: Moist  0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist
Haugen	υ	0.0-6.7: Moist	0.0-6.7: Moist	Wet Moist 0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7: Moist	Wet 6.0-6.7: Moist 0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7: Moist	Wet 6.0-6.7: Moist 0.0-3.0: Moist 3.0-6.0: Wet 6.0-6.7: Moist	Wet 6.0-6.7: Moist 0.0-4.5: Moist 4.5-6.0: Wet 6.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Rosholt, very stony	м м — — — — — — —	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
33B;		0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
Chetek		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
33C:		0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
Chetek		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
38 <b>A:</b>		0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
Rosholt		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
38B:		0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
Rosholt		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
38C;		0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
Rosholt		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
38D:		0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
Rosholt		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
42D:		0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
Amery		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
43B:		0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
Antigo		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
43C:		0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
Antigo		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
43D:		0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
Antigo		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
48A: Brill		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-1.5:   Moist   1.5-2.5:   Wet	0.0-2.0:   Moist   2.0-2.5:   Wet	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7: Moist
			!		2.5-6.7: Moist	2.5-6.7: Moist			<u> </u>	;	1

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October
63A: Crystal Lake	м	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.0: Moist 2.0-5.0: Wet 5.0-6.7:	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
63B: Crystal Lake		0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-5.0: Wet 5.0-6.7: Moist	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 
63C: Crystal Lake	м	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.0: Moist 2.0-5.0: Wet 5.0-6.7:	0.0-3.5: Moist 3.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
63E: Crystal Lake	м	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist 2.5-5.0: Wet 5.0-6.7:	0.0-4.5: Moist 4.5-6.7: Wet	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist 
64A: Totagatic	A/D	0.0-2.0:   Moist   2.0-6.7:   Wet	0.0-2.5: Moist 2.5-6.7:	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7:	0.0-2.0: Moist 2.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-1.5:   Moist  1.5-6.7:   Wet	0.0-0.5: Moist 0.5-6.7:
Winterfield	A/D	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5:   Moist   0.5-6.7:   Wet	0.0-1.5:   Moist   1.5-6.7:   Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-3.0:   Moist   3.0-6.7:   Wet	0.0-3.0: Moist 3.0-6.7:

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
69B: Keweenaw		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist
Sayner	4	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0:   Dry   1.0-6.7:   Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 
Vilas	4 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 
69C: Keweenaw		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Sayner	⋖	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0:   Dry   1.0-6.7:   Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7:   Moist 
Vilas		0.0-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-1.0:   Dry  1.0-6.7:   Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
69E: Keweenaw		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Sаупет	 «	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
69E: Vilas	4 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
74B: Vilas	<b>₫</b> 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
74C: Vilas	<b>₫</b>	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
74D: Vilas		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
100B: Menahga	<b>₫</b> 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist
100C: Menahga	<b>₫</b> 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
100D: Menahga	⋖ 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist 
127D: Amery		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
127D: Rosholt		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
127E: Amery		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Rosholt		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Magnor, very stony	υ	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7:	0.0-0.5: Moist 0.5-3.5: Wet 3.5-6.7:	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist	0.0-6.7: Moist	0.0-3.0: Moist 3.0-3.5: Wet 3.5-6.7:	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7: Moist
Magnor	υ	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7: Moist	0.0-0.5: Moist 0.5-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-3.0: Moist 3.0-3.5: Wet 3.5-6.7: Moist	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7: Moist
157B: Freeon, very stony	υ	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7:	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:
Freeon	υ	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
157C: Freeon, very stony	υ	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7:	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:
Freeon	υ 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:
160A: Oesterle	υ	0.0-3.0: Moist 3.0-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-1.0:   Moist  1.0-6.7:   Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-3.5: Moist 3.5-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-3.0:   Moist  3.0-6.7:	0.0-2.0: Moist 2.0-6.7: Wet
182B: Padus 182C: Padus	м м	0.0-6.7: Moist 0.0-6.7: Moist Moist	0.0-6.7: Moist 0.0-6.7:	0.0-6.7: Moist 0.0-6.7:	0.0-6.7: Moist 0.0-6.7:	0.0-6.7:   Moist	0.0-6.7: Moist 0.0-6.7:	0.0-6.7: Moist 0.0-6.7:	0.0-6.7: Moist 0.0-6.7:	0.0-6.7: Moist   0.0-6.7:	0.0-6.7: Moist 0.0-6.7:
192A: Worcester	υ	0.0-3.0: Moist 3.0-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-1.0:   Moist  1.0-6.7:   Wet	0.0-2.5:   Moist   2.5-6.7:   Wet	0.0-3.5: Moist 3.5-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-3.0:   Moist  3.0-6.7:   Wet	0.0-2.0: Moist 2.0-6.7:
193A; Minocqua	в/р	0.0-2.0:   Moist   2.0-6.7:   Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7:   Wet 	0.0-1.0:   Moist  1.0-6.7:   Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7:	0.0-1.5:   Moist  1.5-6.7:   Wet	0.0-0.5: Moist 0.5-6.7:
215B: Pence	м	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
215C: Pence		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7:   Moist	0.0-6.7: Moist
215D: Pence		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
315A: Rib	В/р	0.0-2.0: Moist 2.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-1.0: Moist 1.0-6.7:	0.0-6.7:   Wet 	0.0-6.7: Wet	0.0-1.0:   Moist   1.0-6.7:   Wet	0.0-2.0: Moist 2.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-1.5:   Moist  1.5-6.7:   Wet	0.0-0.5: Moist 0.5-6.7:
337A: Plover	υ	0.0-2.5: Moist 2.5-3.0: Wet 3.0-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-5.0: Wet 5.0-6.7:	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.0: Moist 5.0-6.7:
368B: Mahtomedi	₹	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	Wet 0.0-6.7: Moist
Cress	<b>4</b>	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	  0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
368C; Mahtomedi	4 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Cress	4 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
368D: Mahtomedi	4 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5:   Dry   1.5-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist
Cress	∢	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7:   Moist	0.0-6.7: Moist
371A: Croswell	4 	0.0-4.0: Moist 4.0-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-0.5: Dry 0.5-4.5: Moist 4.5-6.7:	0.0-1.0: Dry 1.0-5.0: Moist 5.0-6.7:	0.0-4.0: Moist 4.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet
380B: Cress	A	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Rosholt	ф	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
380C: Cress	A	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Rosholt	д	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
380D: Cress	4	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Rosholt	ф	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
383B: Mahtomedi	⋖	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5:   Dry   1.5-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
383C: Mahtomedi	4	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0:   Dry  1.0-6.7:   Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
383D; Mahtomedi	4	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0:   Dry   1.0-6.7:   Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
396B: Friendship	A	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.0: Moist 6.0-6.7:	0.0-4.5: Moist 4.5-6.7:	0.0-6.0: Moist 6.0-6.7:	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7:	0.0-1.5: Dry 1.5-6.7:	0.0-6.7: Moist	0.0-6.7: Moist
Wurtsmith	4	0.0-4.0: Moist 4.0-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-0.5: Dry 0.5-4.5: Moist 4.5-6.7:	0.0-1.0: Dry 1.0-5.0: Moist 5.0-6.7:	0.0-4.0: Moist 4.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet
Grayling	₹	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	Wet   0.0-1.0:   Dry   0.0-6.7:   Moist	Wet   0.0-1.5:   Dry   1.5-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist
397 <b>A:</b> Perchlake	м	0.0-3.0: Moist 3.0-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-1.0: Moist 1.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-3.5: Moist 3.5-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-3.0: Moist 3.0-6.7:	0.0-2.0: Moist 2.0-6.7: Wet
399B: Grayling	4	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 0.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October
399C: Grayling	Æ	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 0.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
399D: Grayling	4	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 0.0-6.7: Moist	0.0-1.5:   Dry   1.5-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist
405A: Lupton	A/D	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet
Cathro	A/D	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7:   Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7:	0.0-6.7:   Wet	0.0-6.7: Wet
Tawas	A/D	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7:   Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7:	0.0-6.7:   Wet	0.0-6.7: Wet
406A: Loxley	A/D	0.0-1.0:   Moist  1.0-6.7:   Wet	0.0-1.0: Moist 1.0-6.7:	0.0-0.5:   Moist   0.5-6.7:   Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7:	0.0-0.5:   Moist   0.5-6.7:   Wet	0.0-0.5:   Moist   0.5-6.7:   Wet	0.0-6.7: Wet
407A: Seelyeville	A/D	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet
Markey	A/D	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7:	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7:	0.0-6.7: Wet
410A: Seelyeville	A/D	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet
Cathro	A/D	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet
412A: Rifle	A/D	0.0-6.7:   Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
412A: Tacoosh	A/D	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet
415A: Greenwood	A/D	0.0-1.0: Moist 1.0-6.0: Wet	0.0-1.0: Moist 1.0-6.0: Wet	0.0-0.5: Moist 0.5-6.0: Wet	0.0-6.0: Wet	0.0-6.0: Wet	0.0-6.0: Wet	0.0-0.5:   Moist   0.5-6.0:   Wet	0.0-0.5: Moist 0.5-6.0:	0.0-0.5: Moist 0.5-6.0: Wet	0.0-6.0: Wet
439B: Graycalm	₫	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0:   Dry   1.0-6.7:   Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Menahga	⋖	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
439C; Graycalm	⋖	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0:   Dry   1.0-6.7:   Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Menahga	⋖	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
439D: Graycalm	⋖	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0:   Dry   1.0-6.7:   Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist 
Menahga	⋖	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0:   Dry   1.0-6.7:   Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist 

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October
441C: Freeon	щ	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist
Cathro	A/D	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7:   Wet	0.0-6.7:   Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7:	0.0-6.7: Wet
442C: Haugen	ф	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7:	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7:	0.0-3.0: Moist 3.0-6.0: Wet 6.0-6.7:	0.0-4.5: Moist 4.5-6.0: Wet 6.0-6.7:	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7: Moist
Greenwood	A/D	0.0-1.0: Moist 1.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Wet	0.0-6.7:   Wet 	0.0-6.7: Wet	0.0-0.5:   Moist   0.5-6.7:   Wet	0.0-0.5: Moist 0.5-6.7:	0.0-0.5:   Moist   0.5-6.7:   Wet	0.0-6.7: Wet
443D: Amery	B A/D	0.0-6.7: Moist 0.0-1.0: Moist 1.0-6.7:	0.0-6.7: Moist 0.0-1.0: Moist	0.0-6.7: Moist 0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Moist 0.0-6.7: Wet	0.0-6.7: Moist 0.0-6.7: Wet	0.0-6.7: Moist 0.0-6.7: Wet	0.0-6.7: Moist 0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Moist 0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Moist 0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Moist 0.0-6.7: Wet
461A: Bowstring	A/D	Met   0.0-2.0:   Moist   2.0-6.7:   Wet	Wet  0.0-2.5:  Moist 2.5-6.7: Wet	Wet 0.0-1.0: Moist 1.0-6.7:	0.0-6.7: Wet	0.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	Wet   Wet	Met 0.0-2.5: Moist 2.5-6.7:	wet   0.0-1.5:   Moist   1.5-6.7:   wet	0.0-0.5: Moist 0.5-6.7: Wet
484A: Greenwood	A/D	0.0-1.0: Moist 1.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Wet

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
484A: Beseman	A/D	0.0-1.0: Moist 1.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Wet	0.0-6.7:   Wet 	0.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Wet
495B: Karlsborg	Α	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7:	0.0-1.5: Moist 1.5-4.0: Wet 4.0-6.7:	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7:	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 
Grettum	⋖	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.0:   Moist   6.0-6.7:	0.0-4.5: Moist 4.5-6.7:	0.0-6.0:   Moist   6.0-6.7:	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5:   Dry   1.5-6.7:   Moist	0.0-6.7:   Moist 	0.0-6.7:   Moist 
Perida	м	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-5.5: Moist 5.5-6.0: Wet 6.0-6.7: Moist	0.0-3.5: Moist 3.5-6.0: Wet 6.0-6.7: Moist	0.0-5.5: Moist 5.5-6.0: Wet 6.0-6.7:	0.0-5.5: Moist 5.5-6.0: Wet 6.0-6.7:	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist
495C: Karlsborg	А	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7:	0.0-1.5: Moist 1.5-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7:	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7:	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist
Grettum	⋖	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.0: Moist 6.0-6.7:	0.0-4.5: Moist 4.5-6.7:	0.0-6.0:   Moist   6.0-6.7:   Wet	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist 
Perida		0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-5.5: Moist 5.5-6.0: Wet 6.0-6.7:	0.0-3.5: Moist 3.5-6.0: Wet 6.0-6.7:	0.0-5.5: Moist 5.5-6.0: Wet 6.0-6.7: Moist	0.0-5.5: Moist 5.5-6.0: Wet 6.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	7u1y	August	September  -	October
495D: Karlsborg	Ф	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7:	0.0-1.5: Moist 1.5-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 
Grettum	4 	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-6.0:   Moist   6.0-6.7:   Wet	0.0-4.5:   Moist   4.5-6.7:	0.0-6.0:   Moist  6.0-6.7:	0.0-6.7: Moist	0.0-1.0:   Dry   1.0-6.7:   Moist	0.0-1.5:   Dry   1.5-6.7:   Moist	0.0-6.7:   Moist 	0.0-6.7: Moist
Perida	м	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-5.5: Moist 5.5-6.0: Wet 6.0-6.7: Moist	0.0-3.5: Moist 3.5-6.0: Wet 6.0-6.7:	0.0-5.5: Moist 5.5-6.0: Wet 6.0-6.7:	0.0-5.5: Moist 5.5-6.0: Wet 6.0-6.7:	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist
497A: Meenon	υ	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-3.0: Moist 3.0-3.5: Wet 3.5-6.7:	0.0-1.5: Moist 1.5-4.5: Wet 4.5-6.7: Moist	0.0-0.5: Moist 0.5-4.5: Wet 4.5-6.7: Moist	0.0-0.5: Moist 0.5-4.5: Wet 4.5-6.7:	0.0-1.5: Moist 1.5-4.5: Wet 4.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7:
515A: Manitowish	м	0.0-4.5: Moist 4.5-6.7:	0.0-5.5: Moist 5.5-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-2.5: Moist  2.5-6.7:	0.0-3.0: Moist 3.0-6.7:	0.0-4.5:   Moist   4.5-6.7:   Wet	0.0-5.0: Moist 5.0-6.7:	0.0-5.5: Moist 5.5-6.7:	0.0-4.5: Moist  4.5-6.7:	0.0-4.0: Moist 4.0-6.7:
521A: Dody	C/D	0.0-0.5: Moist 0.5-4.0: Wet 4.0-6.7:	0.0-1.5: Moist 1.5-4.0: Wet 4.0-6.7: Moist	0.0-4.0: Wet 4.0-6.7: Moist	0.0-4.0: Wet 4.0-6.7: Moist	0.0-4.0: Wet 4.0-6.7: Moist	0.0-1.0: Moist 1.0-4.0: Wet 4.0-6.7: Moist	0.0-2.0: Moist 2.0-4.0: Wet 4.0-6.7:	0.0-2.5: Moist 2.5-4.0: Wet 4.0-6.7:	0.0-2.5: Moist 2.5-4.0: Wet 4.0-6.7: Moist	0.0-0.5: Moist 0.5-4.0: Wet 4.0-6.7: Moist
524E: Rock outcrop.											

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
524E: Frogcreek		0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7:	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:
Metonga		0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3:   Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist
542B: Haugen, very stony		0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7:	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7:	0.0-3.0: Moist 3.0-6.0: Wet 6.0-6.7:	0.0-4.5: Moist 4.5-6.0: Wet 6.0-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 
Haugen		0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7:	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7: Moist	0.0-3.0: Moist 3.0-6.0: Wet 6.0-6.7: Moist	0.0-4.5: Moist 4.5-6.0: Wet 6.0-6.7:	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist 
Haugen, very stony		0.0-6.7: Moist	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7: Moist	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7:	0.0-3.0: Moist 3.0-6.0: Wet 6.0-6.7:	0.0-4.5: Moist 4.5-6.0: Wet 6.0-6.7:	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist 
Haugen		0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7: Moist	0.0-2.0: Moist 2.0-6.0: Wet 6.0-6.7: Moist	0.0-3.0: Moist 3.0-6.0: Wet 6.0-6.7:	0.0-4.5: Moist 4.5-6.0: Wet 6.0-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October
543B: Anigon	м	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	  0.0-6.7:   Moist	0.0-6.7: Moist
543C2: Anigon	м	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
544F: Menahga	⋖	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-1.0:   Dry   1.0-6.7:   Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Mahtomedi	4 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-1.0:   Dry   1.0-6.7:   Moist	0.0-1.5:   Dry   1.5-6.7:   Moist	0.0-6.7:   Moist 	0.0-6.7: Moist
555A: Fordum	Α	0.0-2.0: Moist 2.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-1.0: Moist 1.0-6.7:	0.0-6.7:   Wet 	0.0-6.7:   Wet 	0.0-1.0: Moist 1.0-6.7:	0.0-2.0: Moist 2.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-1.5: Moist  1.5-6.7:	0.0-0.5: Moist 0.5-6.7:
574B: Sayner	۸ 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
574C: Sayner	⋖	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-1.0:   Dry  1.0-6.7:   Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7:   Moist 
574E; Sayner	⋖	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7: Moist 	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-1.0:   Dry  1.0-6.7:   Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7: Moist 

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
579B: Parkfalls	υ	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7:	0.0-0.5: Moist 0.5-3.5: Wet 3.5-6.7:	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-3.0: Moist 3.0-3.5: Wet 3.5-6.7: Moist	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7:
600A: Haplosaprists Psammaquents	а а	0.0-6.7: Wet 0.0-6.7:	0.0-6.7: Wet 0.0-6.7:	0.0-6.0: Wet 0.0-6.0:	0.0-6.7: Wet 0.0-6.7:	0.0-6.7: Wet 0.0-6.7:	0.0-6.7: Wet 0.0-6.7:	0.0-6.7: Wet 0.0-6.7:	0.0-6.7: Wet 0.0-6.7:	0.0-6.7: Wet 0.0-6.7:	0.0-6.7: Wet 0.0-6.7:
615B: Cress	4	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist
615C: Cress	⋖	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	  0.0-6.7:   Moist	0.0-6.7: Moist	  0.0-6.7:   Moist	0.0-6.7: Moist
615D: Cress	4	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist
623A: Capitola	в/р	0.0-1.5:   Moist  1.5-2.5:	0.0-1.5:   Moist  1.5-2.5:	0.0-1.0: Moist 1.0-2.5:	0.0-2.5: Wet 2.5-6.7:	0.0-2.5: Wet 2.5-6.7:	0.0-1.5:   Moist  1.5-2.5:	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-1.5: Moist  1.5-2.5:	0.0-1.0: Moist 1.0-2.5:
624A: Ossmer	υ	2.5-6.7: Moist 0.0-3.0: Moist 3.0-6.7:	2.5-6.7: Moist 0.0-4.0: Moist 4.0-6.7:	2.5-6.7: Moist 0.0-2.5: Moist 2.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-1.0: Moist 1.0-6.7:	2.5-6.7: Moist 0.0-2.5: Moist 2.5-6.7:	0.0-3.5: Moist 3.5-6.7:	0.0-4.0: Moist 4.0-6.7:	2.5-6.7: Moist 0.0-3.0: Moist 3.0-6.7:	2.5-6.7: Moist 0.0-2.0: Moist 2.0-6.7:

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October
632A: Aftad	ф	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-5.0: Wet 5.0-6.7:	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 
632B: Aftad	ф	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-5.0: Wet 5.0-6.7:	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 
Aftad	щ	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-5.0: Wet 5.0-6.7:	0.0-3.5: Moist 3.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	5.5-6.7: Wet 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist 
633F: Pence	д д	0.0-6.7: Moist 0.0-6.7:	0.0-6.7: Moist 0.0-6.7:	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7:	0.0-6.7: Moist 0.0-6.7:	0.0-6.7: Moist 0.0-6.7:	0.0-6.7: Moist 0.0-6.7:	0.0-6.7:   Moist	0.0-6.7: Moist 0.0-6.7:
648B: Sconsin	ф	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist	0.0-6.7: Moist 
670C: Keweenaw	«t щ	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7: Moist	0.0-6.7: Moist 0.0-6.7:	0.0-6.7: Moist 0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October
670 <b>E:</b> Кеweenaw	<b>4</b>	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	  0.0-6.7:   Moist	  0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Pence	Д	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
671B: Spoonerhill, stony	⋖	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.0: Moist 2.0-3.5:	0.0-2.5: Moist 2.5-3.5:	0.0-6.7:   Moist 	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.7:   Moist 	0.0-6.7: Moist
				<u> </u>	3.5-6.7: Moist	3.5-6.7: Moist	¦ 		¦ 	¦ 	
Spoonerhill	م م	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
680B: Stanberry, stony	υ	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Pence, stony	Д	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
683A: Tipler		0.0-4.5: Moist 4.5-6.7:	0.0-5.5: Moist 5.5-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-3.0:   Moist  3.0-6.7:	0.0-4.5: Moist 4.5-6.7:	0.0-5.0: Moist 5.0-6.7:	0.0-5.5: Moist 5.5-6.7:	0.0-4.5: Moist 4.5-6.7:	0.0-4.0: Moist 4.0-6.7:
706A: Winterfield	A/D	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7:	0.0-1.5:   Moist  1.5-6.7:   Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October
706A: Totagatic	Α	0.0-2.0: Moist 2.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-1.0: Moist 1.0-6.7: Wet		0.0-6.7: Wet	0.0-1.0:   Moist   1.0-6.7:   Wet	0.0-2.0:   Moist   2.0-6.7:   Wet	0.0-2.5: Moist 2.5-6.7:	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet
724A: Rib	В/D	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7:   Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7:	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet
Rock outcrop.											
726B: S1ssabagama	4 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-5.0: Wet 5.0-6.7: Moist	0.0-3.0:   Moist   3.0-6.7:   Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-1.0: Dry 1.0-5.5: Moist 5.5-6.7:	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 
733A: Wozny		0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7:	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7:	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-3.5: Wet 3.5-6.7: Moist	0.0-3.5: Wet 3.5-6.7: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7:	0.0-3.0: Moist 3.0-3.5: Wet 3.5-6.0: Moist	0.0-6.7: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7:	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7:
771A: Lenroot	~	0.0-4.0: Moist 4.0-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-0.5: Dry 0.5-4.5: Moist 4.5-6.7:	0.0-1.0: Dry 1.0-5.0: Moist 5.0-6.7:	0.0-4.0: Moist 4.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet
827A: Scoba		0.0-6.7: Moist	0.0-6.7: Moist	0.0-4.0: Moist 4.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-4.0:   Moist   4.0-6.7:   Wet	0.0-5.5: Moist 5.5-6.7: Wet	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist 

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
853C; Frogcreek		0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7:	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:
Stinnett	υ	0.0-2.5: Moist 2.5-4.5: Wet 4.5-6.7:	0.0-2.5: Moist 2.5-4.5: Wet 4.5-6.7: Moist	0.0-1.5: Moist 1.5-4.5: Wet 4.5-6.7:	0.0-0.5: Moist 0.5-4.5: Wet 4.5-6.7: Moist	0.0-1.0: Moist 1.0-4.5: Wet 4.5-6.7: Moist	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist	0.0-3.5: Moist 3.5-4.5: Wet 4.5-6.7:	0.0-2.0: Moist 2.0-4.5: Wet 4.5-6.7:
Могпу	в/р	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-3.5: Wet 3.5-6.7: Moist	0.0-3.5: Wet 3.5-6.7: Moist	0.0-1.5:     Moist 1.5-3.5:     Wet 3.5-6.7:     Moist	0.0-3.0: Moist 3.0-3.5: Wet 3.5-6.0:	0.0-6.7: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7:	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist
856B; Stinnett	υ	0.0-2.5: Moist 2.5-4.5: Wet 4.5-6.7: Moist	0.0-2.5: Moist 2.5-4.5: Wet 4.5-6.7: Moist	0.0-1.5: Moist 1.5-4.5: Wet 4.5-6.7: Moist	0.0-0.5: Moist 0.5-4.5: Wet 4.5-6.7:	0.0-1.0: Moist 1.0-4.5: Wet 4.5-6.7: Moist	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7:	0.0-6.7: Moist	0.0-6.7: Moist	0.0-3.5: Moist 3.5-4.5: Wet 4.5-6.7:	0.0-2.0: Moist 2.0-4.5: Wet 4.5-6.7:
857B; Frogcreek		0.0-6.7: Moist	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7:	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:
857C: Frogoreek		0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
873B: Stanberry		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist 
873C: Stanberry		0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
873D: Stanberry		0.0-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist 
905A: Cublake	м	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist 2.5-5.0: Wet 5.0-6.7:	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-1.0: Dry 1.0-5.5: Moist 5.5-6.7:	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
926A: Flink	м	0.0-3.5: Moist 3.5-4.5: Wet 4.5-6.7: Moist	0.0-3.5: Moist 3.5-4.5: Wet 4.5-6.7:	0.0-2.5: Moist 2.5-4.5: Wet 4.5-6.7:	0.0-1.0: Moist 1.0-4.5: Wet 4.5-6.7:	0.0-1.5: Moist 1.5-4.5: Wet 4.5-6.7: Moist	0.0-2.5: Moist 2.5-4.5: Wet 4.5-6.7: Moist	0.0-3.5: Moist 3.5-4.5: Wet 4.5-6.7:	0.0-4.0: Moist 4.0-4.5: Wet 4.5-6.7: Moist	0.0-3.5: Moist 3.5-4.5: Wet 4.5-6.7:	0.0-2.5: Moist 2.5-4.5: Wet 4.5-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October
943D: Stanberry		0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Greenwood	A/D	0.0-1.0: Moist 1.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Wet	0.0-6.7:   Wet	0.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Wet
948A: Billyboy		0.0-4.5: Moist 4.5-6.7:	0.0-5.5: Moist 5.5-6.7: Wet	0.0-3.0: Moist 3.0-6.7:	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0:   Moist   2.0-6.7:   Wet	0.0-3.5: Moist 3.5-6.7:	0.0-5.0: Moist 5.0-6.7:	0.0-5.5: Moist 5.5-6.7:	0.0-4.5: Moist 4.5-6.7:	0.0-4.0: Moist 4.0-6.7:
970C: Keweenaw	⋖	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist
Pence		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Greenwood	A/D	0.0-1.0:   Moist  1.0-6.7:   Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet	0.0-6.7:   Wet 	0.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet
970E: Keweenaw	4	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Pence		0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Greenwood	A/D	0.0-1.0: Moist 1.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7:	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October
1070C: Fremstadt	4	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist 	0.0-6.0: Moist	0.0-6.0: Moist	0.0-1.5: Dry 1.5-6.0: Moist	0.0-6.0: Moist 	0.0-6.0: Moist
Cress	Ø	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7:   Moist
1070D: Fremstadt	4	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist	0.0-1.5: Dry 1.5-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist
Cress	Ø	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist
1080B: Spoonerhill	ব	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 
Spoonerhill, stony	A	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 
Cress	<b>⋖</b>	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:   Moist	0.0-6.7: Moist
1653C: Stanberry	ф	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	Мау	June	July	August	September	October
1653C: Parkfalls	υ	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-2.5: Moist Vet Wet 3.5-6.7: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7:	0.0-0.5: Moist 0.5-3.5: Wet 3.5-6.7:	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7:	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-3.0: Moist 3.0-3.5: Wet 3.5-6.7:	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7:
Можпу	В/D	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-3.5: Wet 3.5-6.7: Moist	0.0-3.5: Wet 3.5-6.7: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7: Moist	0.0-3.0: Moist 3.0-3.5: Wet 3.5-6.0: Moist	0.0-6.7: Moist 	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist
2015. Pits 2050. Landfill											
3011A: Barronett	В/D	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist Your	Moist Moist 5.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Wet	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-2.0: Maist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-4.0: Maist 4.0-6.7: Wet	0.0-1.5: Wet 1.5-4.0: Moist 4.0-6.7:
3125A: Meehan		0.0-3.0: Moist 3.0-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-2.5: Moist 2.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7:	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7:	0.0-3.5: Moist 3.5-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-3.0: Moist 3.0-6.7:	0.0-2.0: Moist 2.0-6.7: Wet
3126A: Wurtsmith	4 	0.0-4.0: Moist 4.0-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-0.5: Dry 0.5-4.5: Moist 4.5-6.7:	0.0-1.0: Dry 1.0-5.0: Moist 5.0-6.7:	0.0-4.0: Moist 4.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October
3276A: Au Gres		0.0-3.0: Moist 3.0-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-2.5: Moist 2.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0:   Moist   1.0-6.7:   Wet	0.0-2.5: Moist 2.5-6.7:	0.0-3.5: Moist 3.5-6.7:	0.0-4.0: Moist 4.0-6.7:	0.0-3.0: Moist 3.0-6.7:	0.0-2.0: Moist 2.0-6.7: Wet
3312B: Glendenning, very stony	ט	0.0-2.5: Moist 2.5-5.5: Wet 5.5-6.7:	0.0-2.5: Moist 2.5-5.5: Wet 5.5-6.7:	0.0-1.5: Moist 1.5-5.5: Wet 5.5-6.7:	0.0-0.5: Moist 0.5-5.5: Wet 5.5-6.7:	0.0-1.0: Moist 1.0-5.5: Wet 5.5-6.7:	0.0-3.0: Moist 3.0-5.5: Wet 5.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-3.5: Moist 3.5-5.5: Wet 5.5-6.7:	0.0-2.0: Moist 2.0-5.5: Wet 5.5-6.7:
Glendenning	υ	0.0-2.5: Moist 2.5-5.5: Wet 5.5-6.7:	0.0-2.5: Moist 2.5-5.5: Wet 5.5-6.7: Moist	0.0-1.5: Moist 1.5-5.5: Wet 5.5-6.7:	0.0-0.5: Moist 0.5-5.5: Wet 5.5-6.7:	0.0-1.0: Moist 1.0-5.5: Wet 5.5-6.7:	0.0-3.0: Moist 3.0-5.5: Wet 5.5-6.7:	0.0-6.7: Moist	0.0-6.7: Moist	0.0-3.5: Moist 3.5-5.5: Wet 5.5-6.7:	0.0-2.0: Moist 2.0-5.5: Wet 5.5-6.7:
3336A: Fenander	В/D	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7:	0.0-5.5: Moist 5.5-6.7: Wet	0.0-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-1.5: Wet 1.5-4.0: Moist 4.0-6.7:
3403A: Loxley	A/D A/D	0.0-1.0: Moist 1.0-6.7: Wet 0.0-1.0: Moist 1.0-6.7:	0.0-1.0: Moist 1.0-6.7: Wet 0.0-1.0: Moist 1.0-6.7:	0.0-0.5: Moist 0.5-6.7: Wet 0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Wet  0.0-6.7:	0.0-6.7: Wet 0.0-6.7:	0.0-6.7: Wet  0.0-6.7:	0.0-0.5: Moist 0.5-6.7: Wet 0.0-0.5: Moist 0.0-6.7:	0.0-0.5: Moist 0.5-6.7: Wet 0.0-0.5: Moist 0.5-6.7:	0.0-0.5: Moist 0.5-6.7: Wet 0.0-0.5: Moist 0.0-6.7:	0.0-6.7: Wet 0.0-6.7:

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October
3403A: Dawson	A/D	0.0-0.5: Moist 0.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Wet
3424C: Frogcreek		0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5:   Moist   2.5-3.5:   Wet	0.0-1.0: Moist 1.0-3.5: Wet	0.0-1.5:   Moist  1.5-3.5:   Wet	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist 2.5-3.5:
Magroc	υ		0.0-2.5: Moist 2.5-3.5:	3.5-6.7: Moist 0.0-1.5: Moist 1.5-3.5:	3.5-6.7: Moist 0.0-0.5: Moist 0.5-3.5:	3.5-6.7: Moist 0.0-1.0: Moist 1.0-3.5:	0.0-2.5: Moist 2.5-3.5: Wet	0.0-4.0: Moist	0.0-4.0: Moist	0.0-3.0: Moist 3.0-3.5:	3.5-6.7: Moist 0.0-2.0: Moist 2.0-3.5:
Stinnett	υ	3.5-4.0: Moist 0.0-2.5: Moist 2.5-4.5: Wet 4.5-6.7:	Moist Moist Moist 2.5-4.5: Wet 4.5-6.7: Moist	3.5-4.0: Moist 0.0-1.5: Moist 1.5-4.5: Wet 4.5-6.7: Moist	3.5-4.0: Moist 0.0-0.5: Moist 0.5-4.5: Wet 4.5-6.7:	Moist Moist Moist 1.0-4.5: Wet 4.5-6.7: Moist	Moist Moist Moist 3.0-4.5: Wet 4.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	Moist Moist Moist 3.5-4.5: Wet 4.5-6.7: Moist	3.5-4.0: Moist 0.0-2.0: Moist 2.0-4.5: Wet 4.5-6.7: Moist
Rock outcrop. 3446A: Newson	А	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7:	0.0-1.0: Moist 1.0-6.7:	0.0-6.7: Wet	0.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7:	0.0-2.0: Moist 2.0-6.7:	0.0-2.5: Moist 2.5-6.7:	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet
3448B: Grettum		0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.0: Moist 6.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-6.0: Moist 6.0-6.7: Wet	0.0-6.7: Moist	0.0-1.0:   Dry  1.0-6.7:   Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	7uly	August	September  -	October
3448C: Grettum	м	0.0-6.7: Moist	0.0-6.7:   Moist 	0.0-6.0: Moist 6.0-6.7: Wet	0.0-4.5:   Moist   4.5-6.7:   Wet	0.0-6.0: Moist 6.0-6.7:	0.0-6.7: Moist	0.0-1.0:   Dry   1.0-6.7:   Moist	0.0-1.5:   Dry   1.5-6.7:   Moist	0.0-6.7:   Moist 	0.0-6.7: Moist
3516A: Slimlake	ф	0.0-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7:	0.0-3.0: Moist 3.0-6.7:	0.0-4.5: Moist 4.5-6.7:	0.0-5.0:   Moist   5.0-6.7:   Wet	0.0-5.5: Moist 5.5-6.7:	0.0-4.5: Moist  4.5-6.7:   Wet	0.0-4.0: Moist 4.0-6.7:
3629B; Perida	& 	0.0-6.7: Moist	0.0-6.7: Moist 	0.0-5.5: Moist 5.5-6.0: Wet 6.0-6.7:	0.0-3.5: Moist 3.5-6.0: Wet 6.0-6.7:	0.0-5.5: Moist 5.5-6.0: Wet 6.0-6.7:	0.0-5.5: Moist 5.5-6.0: Wet 6.0-6.7:	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist 
M-W. Miscellaneous water W.											

Table 27. -- Flooding Frequency and Duration

(See text for definitions of terms used in this table. Absence of an entry indicates that data were not estim

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
3A: Totagatic	Rare Brief	Rare Brief	  Occasional   Frequent   Brief   Long	Frequent Long	Frequent Long	Occasional Brief	Rare Brief	Rare Brief	Occasional Brief	Occasiona] Brief
Bowstring	Rare Brief	Rare Brief	Occasional   Frequent   Long   Long	Frequent Long	Frequent	Occasional Rare Long Brid	Rare Brief	Rare Brief	Occasional Brief	Occasiona. Brief
Ausable	Rare Brief	Rare Brief	Occasional Long	Frequent Long	Frequent	Occasional Rare Long Brie	Rare Brief	Rare Brief	Occasional Brief	Occasional Brief
22A: Comstock	None	None	None	None	None	None	None	None	None	None
24A: Poskin	None	None	None	None	None	None	None	None	None	None
27A: Scott Lake	None	None	None	None	None	None	None	None	None	None
28B: Haugen, very stony	None	None	None	None	None	None	None	None	None	None
Haugen	None	None	None	None	None	None	None	None	None	None
Rosholt, very stony	None	None	None	None	None	None	None	None	None	None
Rosholt	None	None	None	None	None	None	None	None	None	None
28C: Haugen, very stony	None	None	None	None	None	None	None	None	None	None
Haugen	None	None	None	None	None	None	None	None	None	None
Rosholt, very stony	None	None	None	None	None	None	None	None	None	None
Rosholt	None	None	None	None	None	None	None	None	None	None
33B: Chetek	None	None	None	None	None	None	None	None	None	None

Table 27..--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
33C: Chetek	None	None	None	None	None	None	None	None	None	None
38A: Rosholt	None	None	None	None	None	None	None	None	None	None
38B: Rosholt	None	None	None	None	None	None	None	None	None	None
38C: Rosholt	None	None	None	None	None	None	None	None	None	None
38D: Rosholt	None	None	None	None	None	None	None	None	None	None
42D: Amery	None	None	None	None	None	None	None	None	None	None
43B: Antigo	None	None	None	None	None	None	None	None	None	None
43C: Antigo	None	None	None	None	None	None	None	None	None	None
43D: Antigo	None	None	None	None	None	None	None	None	None	None
48A: Brill	None	None	None	None	None	None	None	None	None	None
63A: Crystal Lake	None	None	None	None	None	None	None	None	None	None
63B: Crystal Lake	None	None	None	None	None	None	None	None	None	None
63C: Crystal Lake	None	None	None	None	None	None	None	None	None	None
63E: Crystal Lake	None	None	None	None	None	None	None	None	None	None
64A: Totagatic	Rare Brief	Rare Brief	Occasional Frequent Brief Long	Frequent   Long	Frequent	Occasional   Rare   Brief   Brie	ų,	Rare Brief	Occasional   Occasiona    Brief   Brief	Occasiona. Brief

Table 27. -- Flooding Frequency and Duration -- Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
64A: Winterfield	Rare Brief	Rare Brief		Frequent	Occasional Brief	  Occasional   Brief		Occasional Brief	Occasional Brief	Occasiona. Brief
69В: Кеwеепаw	None	None	None	None	None	None	None	None	None	None
Sayner	None	None	None	None	None	None	None	None	None	None
Vilas	None	None	None	None	None	None	None	None	None	None
69C: Keweenaw	None	None	None	None	None	None	None	None	None	None
Sayner	None	None	None	None	None	None	None	None	None	None
Vilas	None	None	None	None	None	None	None	None	None	None
69E: Keweenaw	None	None	None	None	None	None	None	None	None	None
Sayner	None	None	None	None	None	None	None	None	None	None
Vilas	None	None	None	None	None	None	None	None	None	None
74B: Vilas	None	None	None	None	None	None	None	None	None	None
74C: Vilas	None	None	None	None	None	None	None	None	None	None
74D: Vilas	None	None	None	None	None	None	None	None	None	None
100B: Menahga	None	None	None	None	None	None	None	None	None	None
100C: Menahga	None	None	None	None	None	None	None	None	None	None
100D: Menahga	None	None	None	None	None	None	None	None	None	None
127D: Amery	None	None	None	None	None	None	None	None	None	None

Table 27. -- Flooding Frequency and Duration -- Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
127D: Rosholt	None	None	None	None	None	None	None	None	None	None
127E: Amery	None	None	None	None	None	None	None	None	None	None
Rosholt	None	None	None	None	None	None	None	None	None	None
156B: Magnor, very stony	None	None	None	None	None	None	None	None	None	None
Magnor	None	None	None	None	None	None	None	None	None	None
157B: Freeon, very stony	None	None	None	None	None	None	None	None	None	None
Freeon	None	None	None	None	None	None	None	None	None	None
157C: Freeon, very stony	None	None	None	None	None	None	None	None	None	None
Freeon	None	None	None	None	None	None	None	None	None	None
160A: Oesterle	None	None	None	None	None	None	None	None	None	None
182B: Padus	None	None	None	None	None	None	None	None	None	None
182C: Padus	None	None	None	None	None	None	None	None	None	None
192A: Worcester	None	None	None	None	None	None	None	None	None	None
193A: Minocqua	None	None	None	None	None	None	None	None	None	None
215B: Pence	None	None	None	None	None	None	None	None	None	None
215C: Pence	None	None	None	None	None	None	None	None	None	None

Table 27. -- Flooding Frequency and Duration--Continued

October	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
September	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
August	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
July	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
June	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
May	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
April	None	None [	None	None 1	None	None	None	None 1	None	None	None 1	None	None 1	None	None	None	None
March	None	None 1	None	None	None	None 1	None 1	None	None	None 1	None	None	None	None	None 1	None	None h
February	None	None N	None N	None N	None	None N	None	None N	None	None	None	None	None N	None	None N	None	None
January	None	None	None	None	None   N	None	None	None	None	None	None	None	None	None	None	None	None
Map symbol and soil name	215D: Pence	315A: Rib N	337A: Plover N	368B: Mahtomedi N	Cress N	368C: Mahtomedi N	CressN	368D: Mahtomedi N	CressN	371A: Croswell	380B: Cress	Rosholt	380C: Cress	Rosholt	380D: Cress	Rosholt	383B: Mahtomedi N

Table 27. -- Flooding Frequency and Duration -- Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
383C: Mahtomedi	None	None	None	None	None	    None	None	None	None	None
383D: Mahtomedi	None	None	None	None	None	  None	None	None	None	None
396B: Friendship	None	None	None	None	None	None	None	None	None	None
Wurtsmith	None	None	None	None	None	None	None	None	None	None
Grayling	None	None	None	None	None	None	None	None	None	None
397A: Perchlake	None	None	None	None	None	None	None	None	None	None
399B: Grayling	None	None	None	None	None	  None	None	None	None	None
399C: Grayling	None	None	None	None	None	None	None	None	None	None
399D: Grayling	None	None	None	None	None	None	None	None	None	None
405A: Lupton	None	None	None	None	None	None	None	None	None	None
Cathro	None	None	None	None	None	None	None	None	None	None
Tawas	None	None	None	None	None	None	None	None	None	None
406A: Loxley	None	None	None	None	None	None	None	None	None	None
407A: Seelyeville	None	None	None	None	None	None	None	None	None	None
Markey	None	None	None	None	None	None	None	None	None	None
410A: Seelyeville	None	None	None	None	None	None	None	None	None	None
Cathro	None	None	None	None	None	None	None	None	None	None

Table 27.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
412A: Rifle	None	None	None	None	None	None	None	None	None	None
Tacoosh	None	None	None	None	None	None	None	None	None	None
415A: Greenwood	None	None	None	None	None	None	None	None	None	None
439B; Graycalm	None	None	None	None	None	None	None	None	None	None
Menahga	None	None	None	None	None	None	None	None	None	None
439C; Graycalm	None	None	None	None	None	None	None	None	None	None
Menahga	None	None	None	None	None	None	None	None	None	None
439D; Graycalm	None	None	None	None	None	None	None	None	None	None
Menahga	None	None	None	None	None	None	None	None	None	None
441C: Freeon	None	None	None	None	None	None	None	None	None	None
Cathro	None	None	None	None	None	None	None	None	None	None
442C: Haugen	None	None	None	None	None	None	None	None	None	None
Greenwood	None	None	None	None	None	None	None	None	None	None
443D: Amery	None	None	None	None	None	None	None	None	None	None
Greenwood	None	None	None	None	None	None	None	None	None	None
461A: Bowstring	Rare Brief	Rare Brief	  Occasional  Frequent  Long   Long	Frequent Long	Frequent	Occasional	Rare Brief	Rare Brief	Occasional	Occasiona. Brief
484A: Greenwood	None	None	None	None	None	None	None	None	None	None

Table 27.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
484A: Beseman	None	None	None	None	None	None	None	None	None	None
495B: Karlsborg	None	None	None	None	None	None	None	None	None	None
Grettum	None	None	None	None	None	None	None	None	None	None
Perida	None	None	None	None	None	None	None	None	None	None
495C: Karlsborg	None	None	None	None	None	None	None	None	None	None
Grettum	None	None	None	None	None	None	None	None	None	None
Perida	None	None	None	None	None	None	None	None	None	None
495D: Karlsborg	None	None	None	None	None	None	None	None	None	None
Grettum	None	None	None	None	None	None	None	None	None	None
Perida	None	None	None	None	None	None	None	None	None	None
497A: Meenon	None	None	None	None	None	None	None	None	None	None
515A: Manitowish	None	None	None	None	None	None	None	None	None	None
521A: Dody	None	None	None	None	None	None	None	None	None	None
524E: Rock outcrop.										
Frogcreek	None	None	None	None	None	None	None	None	None	None
Metonga	None	None	None	None	None	None	None	None	None	None
542B: Haugen, very stony	None	None	None	None	None	None	None	None	None	None
Haugen	- None	None	None	None	None	None	None	None	None	None

Table 27. -- Flooding Frequency and Duration -- Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
542C: Haugen, very										
stony	None	None	None	None	None	None	None	None	None	None
Haugen	None	None	None	None	None	None	None	None	None	None
543B: Anigon	None	None	None	None	None	None	None	None	None	None
543C2: Anigon	None	None	None	None	None	None	None	None	None	None
544F: Menahga	None	None	None	None	None	None	None	None	None	None
Mahtomedi	None	None	None	None	None	None	None	None	None	None
555 <b>A:</b> Fordum	Rare Brief	Rare Brief	Occasional Brief	Frequent	Frequent Long	Occasional Brief	Rare Brief	Rare Brief	Occasional Brief	Occasional Brief
574B: Sayner	None	None	None	None	None	None	None	None	None	None
574C: Sayner	None	None	None	None	None	None	None	None	None	None
574E: Sayner	None	None	None	None	None	None	None	None	None	None
579B: Parkfalls	None	None	None	None	None	None	None	None	None	None
600A: Haplosaprists	None	None	None	None	None	None	None	None	None	None
Psammaquents	- None	None	None	None	None	None	None	None	None	None
615B: Cress	None	None	None	None	None	None	None	None	None	None
615C: Cress	- None	None	None	None	None	None	None	None	None	None
615D: Cress	None	None	None	None	None	None	None	None	None	None

Table 27. -- Flooding Frequency and Duration -- Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
623A: Capitola	None	None	None	None	None	None	None	None	None	None
624A: Ossmer	None	None	None	None	None	None	None	None	None	None
632A: Aftad	None	None	None	None	None	None	None	None	None	None
632B: Aftad	None	None	None	None	None	None	None	None	None	None
632C: Aftad	None	None	None	None	None	None	None	None	None	None
633F: Pence	None	None	None	None	None	None	None	None	None	None
Padus	None	None	None	None	None	None	None	None	None	None
648B: Sconsin	None	None	None	None	None	None	None	None	None	None
670C: Keweenaw	None	None	None	None	None	None	None	None	None	None
Pence	None	None	None	None	None	None	None	None	None	None
670E: Keweenaw	None	None	None	None	None	None	None	None	None	None
Pence	None	None	None	None	None	None	None	None	None	None
671B: Spoonerhill, stony	None	None	None	None	None	None	None	None	None	None
Spoonerhill	None	None	None	None	None	None	None	None	None	None
680B: Stanberry, stony None	None	None	None	None	None	None	None	None	None	None
Pence, stony	None	None	None	None	None	None	None	None	None	None
683A: Tipler	None	None	None	None	None	None	None	None	None	None

Table 27. -- Flooding Frequency and Duration -- Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
706A: Winterfield	Rare Brief	Rare Brief	Occasional   Frequent   Brief   Long	Frequent Long	Occasional	Occasional Brief	Occasional Brief	Occasional Brief	Occasional Occasional Occasional Occasional Occasional Brief Brief Brief Brief Brief	Occasiona. Brief
Totagatic	Rare Brief	Rare   Brief	Occasional Frequent Brief Long	Frequent Long	Frequent   Long	Occasional Rare Brief Brie	Rare Brief	Rare Brief	Occasional Occasional Brief Brief	Occasiona: Brief
724A: Rib	None	None	None	None	None	None	None	None	None	None
Rock outcrop.										
726B: Sissabagama	None	None	None	None	None	None	None	None	None	None
733A: Wozny	None	None	None	None	None	None	None	None	None	None
771A: Lenroot	None	None	None	None	None	None	None	None	None	None
827A: Scoba	None	None	None	None	None	None	None	None	None	None
853C: Frogcreek	None	None	None	None	None	None	None	None	None	None
Stinnett	None	None	None	None	None	None	None	None	None	None
Wozny	None	None	None	None	None	None	None	None	None	None
856B: Stinnett	None	None	None	None	None	None	None	None	None	None
857B: Frogcreek	None	None	None	None	None	None	None	None	None	None
857C: Frogcreek	None	None	None	None	None	None	None	None	None	None
873B: Stanberry	None	None	None	None	None	None	None	None	None	None
873C: Stanberry	None	None	None	None	None	None	None	None	None	None

Table 27.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October
873D: Stanberry	None	None	   None	     None	None	None	None	None	None	None
905A: Cublake	None	None	  None	  None	None	None	None	None	None	None
926A: Flink	None	None	None	None	None	None	None	None	None	None
943D: Stanberry	None	None	None	None	None	None	None	None	None	None
Greenwood	None	None	None	None	None	None	None	None	None	None
948A: Billyboy	None	None	None	None	None	None	None	None	None	None
970C: Keweenaw	None	None	None	None	None	None	None	None	None	None
Pence	None	None	None	None	None	None	None	None	None	None
Greenwood	None	None	None	None	None	None	None	None	None	None
970E: Keweenaw	None	None	None	None	None	None	None	None	None	None
Pence	None	None	None	None	None	None	None	None	None	None
Greenwood	None	None	None	None	None	None	None	None	None	None
1070C: Fremstadt	None	None	None	None	None	None	None	None	None	None
Cress	None	None	None	None	None	None	None	None	None	None
1070D: Fremstadt	None	None	None	None	None	None	None	None	None	None
Cress	None	None	None	None	None	None	None	None	None	None
1080B: Spoonerhill	None	None	None	None	None	None	None	None	None	None

Table 27. -- Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
1080B: Spoonerhill, stony	None	None	None	None	None	None	None	None	None	None
Cress	None	None	None	None	None	None	None	None	None	None
1653C: Stanberry	None	None	None	None	None	None	None	None	None	None
Parkfalls	None	None	None	None	None	None	None	None	None	None
Wozny	None	None	None	None	None	None	None	None	None	None
2015. Pits		· — -								
2050. Landfill										
3011A: Barronett	None	None	None	None	None	None	None	None	None	None
3125A: Meehan	None	None	None	None	None	None	None	None	None	None
3126A: Wurtsmith	None	None	None	None	None	None	None	None	None	None
3276A: Au Gres	None	None	None	None	None	None	None	None	None	None
3312B: Glendenning, very stony	None	None	None	None	None	None	None	None	None	None
Glendenning	None	None	None	None	None	None	None	None	None	None
3336A: Fenander	None	None	None	None	None	None	None	None	None	None
3403A: Loxley	None	None	None	None	None	  None	None	None	None	None
Beseman	None	None	None	None	None	None	None	None	None	None
Dawson	None	None	None	None	None	None	None	None	None	None

Table 27.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
3424C: Frogcreek	None	None	None	None	None	None	None	None	None	None
Magroc	None	None	None	None	None	None	None	None	None	None
Stinnett	- None	None	None	None	None	None	None	None	None	None
Rock outcrop.										
3446A: Newson	None	None	None	None	None	None	  None	None	None	None
3448B: Grettum	None	None	None	None	None	None	None	None	None	None
3448C: Grettum	None	None	None	None	None	None	None	None	None	None
3516A: Slimlake	None	None	None	None	None	None	None	None	None	None
3629B: Perida	- None	None	None	None	None	None	None	None	None	None
M-W. Miscellaneous water										
W. Water										

Table 28. -- Ponding Frequency, Duration, and Depth

(Depth refers to the depth, in feet, of the water above the surface. See text for definitions of terms used in this table. Abse indicates that no estimate was made)

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October
3A: Totagatic	None	None	None	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	None	None	None	None	None
Bowstring	None	None	None	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	None	None	None	None	None
Ausable	None	None	None	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	None	None	None	None	None
22A: Comstock	None	None	None	None	None	None	None	None	None	None
24A: Poskin	None	None	None	None	None	None	None	None	None	None
27A: Scott Lake	None	None	None	None	None	None	None	None	None	None
28B: Haugen, very stony	None	None	None	None	None	None	None	None	None	None
Haugen	None	None	None	None	None	None	None	None	None	None
Rosholt, very stony	None	None	None	None	None	None	None	None	None	None
Rosholt	None	None	None	None	None	None	None	None	None	None
28C: Haugen, very stony	None	None	None	None	None	None	None	None	None	None
Haugen	- None	None	None	None	None	None	None	None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October
28C: Rosholt, very stony	None	None	None	None	None	None	None	None	None	None
Rosholt	- None	None	None	None	None	None	None	None	None	None
33B: Chetek	None	None	None	None	None	None	None	None	None	None
33C: Chetek	None	None	None	None	None	None	None	None	None	None
38A: Rosholt	None	None	None	None	None	None	None	None	None	None
38B: Rosholt	None	None	None	None	None	None	None	None	None	None
38C: Rosholt	None	None	None	None	None	None	None	None	None	None
38D: Rosholt	None	None	None	None	None	None	None	None	None	None
42D: Amery	None	None	None	None	None	None	None	None	None	None
43B: Antigo	None	None	None	None	None	None	None	None	None	None
43C: Antigo	None	None	None	None	None	None	None	None	None	None
43D: Antigo	None	None	None	None	None	None	None	None	None	None
48A: Brill	None	None	None	None	None	None	None	None	None	None
63A: Crystal Lake	- None	None	None	None	None	None	None	None	None	None
63B: Crystal Lake	None	None	None	None	None	None	None	None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
63C: Crystal Lake	None	None	None	None	None	None	None	None	None	None
63E: Crystal Lake	None	None	None	None	None	None	None	None	None	None
64A: Totagatic	None	None	None	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	None	None	None	None	None
Winterfield	None	None	None	None	None	None	None	None	None	None
69B: Keweenaw	None	None	None	None	None	None	None	None	None	None
Sayner	None	None	None	None	None	None	None	None	None	None
Vilas	None	None	None	None	None	None	None	None	None	None
69C: Keweenaw	None	None	None	None	None	None	None	None	None	None
Sayner	None	None	None	None	None	None	None	None	None	None
Vilas	None	None	None	None	None	None	None	None	None	None
69E: Keweenaw	None	None	None	None	None	None	None	None	None	None
Sayner	None	None	None	None	None	None	None	None	None	None
Vilas	None	None	None	None	None	None	None	None	None	None
74B: Vilas	None	None	None	None	None	None	None	None	None	None
74C: Vilas	None	None	None	None	None	None	None	None	None	None
74D: Vilas	None	None	None	None	None	None	None	None	None	None
100B: Menahga	None	None	None	None	None	None	None	None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
100C: Menahga	None	None	None	None	None	None	None	None	None	None
100D: Menahga	None	None	None	None	None	None	None	None	None	None
127D: Amery	None	None	None	None	None	None	None	None	None	None
Rosholt	None	None	None	None	None	None	None	None	None	None
127E: Amery	None	None	None	None	None	None	None	None	None	None
Rosholt	None	None	None	None	None	None	None	None	None	None
156B: Magnor, very stony	None	None	None	None	None	None	None	None	None	None
Magnor	None	None	None	None	None	None	None	None	None	None
157B: Freeon, very stony	None	None	None	None	None	None	None	None	None	None
Freeon	None	None	None	None	None	None	None	None	None	None
157C: Freeon, very stony	None	None	None	None	None	None	None	None	None	None
Freeon	None	None	None	None	None	None	None	None	None	None
160A: Oesterle	None	None	None	None	    None	None	None	None	None	None
182B: Padus	None	None	None	None	None	None	None	None	None	None
182C: Padus	None	None	None	None	None	None	None	None	None	None
192A: Wordester	None	None	None	None	    None 	None	None	None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
193A: Minocqua	None	None	None	Frequent Long Depth:	Frequent Long Depth: 0.5	None	None	None	None	None
215B: Pence	None	None	None	None	None	None	None	None	None	None
215C: Pence	None	None	None	None	None	None	None	None	None	None
215D: Pence	None	None	None	None	None	None	None	None	None	None
315A: Rib	None	None	None	Frequent Long Depth:	Frequent Long Depth:	None	None	None	None	None
337A: Plover	None	None	None	None	None	None	None	None	None	None
368B: Mahtomedi	None	None	None	None	None	None	None	None	None	None
Cress	None	None	None	None	None	None	None	None	None	None
368C: Mahtomedi	None	None	None	None	None	None	None	None	None	None
Cress	None	None	None	None	None	None	None	None	None	None
368D: Mahtomedi	None	None	None	None	None	None	None	None	None	None
Cress	None	None	None	None	None	None	None	None	None	None
371A: Croswell	None	None	None	None	None	None	None	None	None	None
380B: Cress	None	None	None	None	None	None	None	None	None	None
Rosholt	None	None	None	None	None	None	None	None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
380C: Cress	None	None	None	None	None	None	None	None	None	None
Rosholt	None	None	None	None	None	None	None	None	None	None
380D; Cress	None	None	None	None	None	None	None	None	None	None
Rosholt	None	None	None	None	None	None	None	None	None	None
383B: Mahtomedi	None	None	None	None	None	None	None	None	None	None
383C: Mahtomedi	None	None	None	None	None	None	None	None	None	None
383D: Mahtomedi	None	None	None	None	None	None	None	None	None	None
396B: Friendship	None	None	None	None	None	None	None	None	None	None
Wurtsmith	None	None	None	None	None	None	None	None	None	None
Grayling	None	None	None	None	None	None	None	None	None	None
397A: Perchlake	None	None	None	None	None	None	None	None	None	None
399B: Grayling	None	None	None	None	None	None	None	None	None	None
399C: Grayling	None	None	None	None	None	None	None	None	None	None
399D: Grayling	None	None	None	None	None	None	None	None	None	None
405A: Lupton	None	None	Occasional Frequent Brief Long Depth: Depth:	Frequent Long Depth:	Frequent Long Depth:	Occasional None Brief Depth:		None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
405A: Cathro	None	None	Occasional Brief Depth:	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Occasional None Brief Depth:	None	None	None	None
Tawas	None	None	Occasional Brief Depth:	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Occasional None Brief Depth:	None	None	None	None
406A: Loxley	None	None	None	Occasional None Long Depth:	None	None	None	None	None	None
407A: Seelyeville	None	None	Occasional Frequent Brief Long Depth: Depth:	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Occasional None Brief Depth:	None	None	None	None
Markey	None	None	Occasional Brief Depth:	Frequent Long Depth:	Frequent Long Depth: 0.5	Occasional Brief Depth:	None	None	None	None
410A: Seelyeville	None	None	Occasional Brief Depth:	Frequent Long Depth:	Frequent Long Depth: 0.5	Occasional None Brief Depth:	None	None	None	None
Cathro	None	None	Occasional Brief Depth:	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Occasional None Brief Depth:	None	None	None	None
412A: Rifle	None	None	Occasional Frequent Brief Long Depth: Depth:	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Occasional None Brief   Depth:   0.5	None	None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
412A: Tacoosh	None	None	Occasional Frequent Brief Long Depth: Depth: 0.5	Frequent Long Depth:	Frequent Long Depth:	Occasional None Brief Depth:	None	None	None	None
415A: Greenwood	None	None	None	Occasional None Long Depth:	None	None	None	None	None	None
439B: Graycalm	None	None	None	None	None	None	None	None	None	None
Menahga	None	None	None	None	None	None	None	None	None	None
439C; Graycalm	None	None	None	None	None	None	None	None	None	None
Menahga	None	None	None	None	None	None	None	None	None	None
439D: Graycalm	None	None	None	None	None	None	None	None	None	None
Menahga	None	None	None	None	None	None	None	None	None	None
441C: Freeon	None	None	None	None	None	None	None	None	None	None
Cathro	None	None	Occasional Brief Depth:	Frequent Long Depth:	Frequent Long Depth: 0.5	Occasional Brief Depth: 0.5	None	None	None	None
442C: Haugen	None	None	None	None	None	None	None	None	None	None
Greenwood	None	None	None	Occasional Long Depth: 0.5	None	None	None	None	None	None
443D: Amery	None	None	None	None	None	None	None	None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
443D: Greenwood	None	None	None	Occasional Long Depth:	None	None	None	None	None	None
461A: Bowstring	None	None	None	Frequent Long Depth:	Frequent Long Depth: 0.5	None	None	None	None	None
484A: Greenwood	None	None	None	Occasional None Long Depth: 0.5		None	None	None	None	None
Beseman	None	None	None	Occasional None Long Depth:		None	None	None	None	None
495B: Karlsborg	None	None	None	None	None	None	None	None	None	None
Grettum	None	None	None	None	None	None	None	None	None	None
Perida	None	None	None	None	None	None	None	None	None	None
495C: Karlsborg	None	None	None	None	None	None	None	None	None	None
Grettum	None	None	None	None	None	None	None	None	None	None
Perida	None	None	None	None	None	None	None	None	None	None
495D: Karlsborg	None	None	None	None	None	None	None	None	None	None
Grettum	None	None	None	None	None	None	None	None	None	None
Perida	None	None	None	None	None	None	None	None	None	None
497A: Meenon	None	None	None	None	None	None	None	None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
515A: Manitowish	None	None	None	None	None	None	None	None	None	None
521A: Dody	None	None	None	Frequent Long Depth:	Occasional Brief Depth:	None	None	None	None	Occasional Brief Depth: 0.5
524E: Rock outcrop.										
Frogcreek	- None	None	None	None	None	None	None	None	None	None
Metonga	- None	None	None	None	None	None	None	None	None	None
542B: Haugen, very stony	None	None	None	None	None	None	None	None	None	None
Haugen	- None	None	None	None	None	None	None	None	None	None
542C: Haugen, very stony	None	None	None	None	None	None	None	None	None	None
Haugen	- None	None	None	None	None	None	None	None	None	None
543B: Anigon	None	None	None	None	None	None	None	None	None	None
543C2: Anigon	None	None	None	None	None	None	None	None	None	None
544F: Menahga	None	None	None	None	None	None	None	None	None	None
Mahtomedi	- None	None	None	None	None	None	None	None	None	None
555A: Fordum	None	None	None	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	None	None	None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October
574B: Sayner	None	None	None	None	None	None	None	None	None	None
574C: Sayner	None	None	None	None	None	None	None	None	None	None
574E: Sayner	None	None	None	None	None	None	None	None	None	None
579B: Parkfalls	None	None	None	None	None	None	None	None	None	None
600A: Haplosaprists	Frequent Very long Depth:	Frequent Very long Depth:	Frequent Very long Depth:	Frequent Very long Depth:	Frequent Very long Depth:	Frequent Very long Depth:	Frequent Very long Depth:	Frequent Very long Depth:	Frequent Very long Depth:	Frequent Very long Depth:
Psammaquents	Frequent Very long Depth:	Frequent Very long Depth: 1.0	Frequent Very long Depth:	Frequent Very long Depth:	Frequent Very long Depth: 1.0	Frequent Very long Depth:	Frequent Very long Depth:	Frequent Very long Depth:	Frequent Very long Depth:	Frequent Very long Depth: 1.0
615B: Cress	None	None	None	None	None	None	None	None	None	None
615C: Cress	None	None	None	None	None	None	None	None	None	None
615D: Cress	None	None	None	None	None	None	None	None	None	None
623A: Capitola	None	None	None	Frequent Long Depth:	Frequent Long Depth: 0.5	None	None	None	None	None
624A: Ossmer	None	None	None	None	None	None	None	None	None	None
632A: Aftad	None	None	None	None	None	None	None	None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
632B: Aftad	None	None	None	None	None	None	None	None	None	None
632C: Aftad	None	None	None	None	None	None	None	None	None	None
633F: Pence	None	None	None	None	None	None	None	None	None	None
Padus	None	None	None	None	None	None	None	None	None	None
648B: Sconsin	None	None	None	None	None	None	None	None	None	None
670C: Keweenaw	None	None	None	None	None	None	None	None	None	None
Pence	None	None	None	None	None	None	None	None	None	None
670E: Keweenaw	None	None	None	None	None	None	None	None	None	None
Pence	None	None	None	None	None	None	None	None	None	None
671B: Spoonerhill, stony	None	None	None	None	None	None	None	None	None	None
Spoonerhill	None	None	None	None	None	None	None	None	None	None
680B: Stanberry, stony None	None	None	None	None	None	None	None	None	None	None
Pence, stony	None	None	None	None	None	None	None	None	None	None
683A: Tipler	None	None	None	None	None	None	None	None	None	None
706A: Winterfield	None	None	None	None	None	None	None	None	None	None
Totagatic	None	None	None	Frequent Long Depth: 0.5	Frequent Long Depth:	None	None	None	None	None

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October
724A: Rib	None	None	None	Frequent Long Depth:	Frequent Long Depth:	None	None	None	None	None
Rock outcrop.										
726B: Sissabagama	None	None	None	None	None	None	None	None	None	None
733A: Wozny	None	None	None	Frequent Long Depth:	Frequent Long Depth: 0.5	None	None	None	None	None
771A: Lenroot	None	None	None	None	None	None	None	None	None	None
827A: Scoba	None	None	None	None	None	None	None	None	None	None
853C: Frogcreek	None	None	None	None	None	None	None	None	None	None
Stinnett	None	None	None	None	None	None	None	None	None	None
Wozny	None	None	None	Frequent Long Depth:	Frequent Long Depth: 0.5	None	None	None	None	None
856B: Stinnett	None	None	None	None	None	None	None	None	None	None
857B: Frogcreek	None	None	None	None	None	None	None	None	None	None
857C: Frogcreek	None	None	None	None	None	None	None	None	None	None
873B: Stanberry	None	None	None	None	None	None	None	None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
873C: Stanberry	None	None	None	None	None	None	None	None	None	None
873D: Stanberry	None	None	None	None	None	None	None	None	None	None
905A: Cublake	None	None	None	None	None	None	None	None	None	None
926A: Flink	None	None	None	None	None	None	None	None	None	None
943D: Stanberry	None	None	None	None	None	None	None	None	None	None
Greenwood	None	None	None	Occasional None Long Depth:	None	None	None	None	None	None
948A: Billyboy	None	None	None	None	None	None	None	None	None	None
970C: Keweenaw	None	None	None	None	None	None	None	None	None	None
Pence	None	None	None	None	None	None	None	None	None	None
Greenwood	None	None	None	Occasional None Long Depth:	None	None	None	None	None	None
970E: Keweenaw	None	None	None	None	None	None	None	None	None	None
Pence	None	None	None	None	None	None	None	None	None	None
Greenwood	None	None	None	Occasional Long Depth:	None	None	None	None	None	None
1070C: Fremstadt	None	None	None	None	None	None	None	None	None	None

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
1070C: Cress	None	None	None	None	None	None	None	None	None	None
1070D: Fremstadt	None	None	None	None	None	None	None	None	None	None
Cress	None	None	None	None	None	None	None	None	None	None
1080B: Spoonerhill	None	None	None	None	None	None	None	None	None	None
Spoonerhill, stony	None	None	None	None	None	None	None	None	None	None
Cress	None	None	None	None	None	None	None	None	None	None
1653C: Stanberry	None	None	None	None	None	None	None	None	None	None
Parkfalls	None	None	None	None	None	None	None	None	None	None
Wozny	None	None	None	Frequent Long Depth:	Frequent Long Depth:	None	None	None	None	None
2015. Pits										
2050. Landfill										
3011A: Barronett	None	None	None	Frequent Long Depth:	Frequent Long Depth:	None	None	None	None	None
3125A: Meehan	None	None	None	None	None	None	None	None	None	None
3126A: Wurtsmith	None	None	None	None	None	None	None	None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	Мау	June	July	August	September	October
3276A: Au Gres	None	None	None	None	None	None	None	None	None	None
3312B: Glendenning, very stony	None	None	None	None	None	None	None	None	None	None
Glendenning	None	None	None	None	None	None	None	None	None	None
3336A: Fenander	None	None	None	Frequent Long Depth: 0.5	Frequent Long Depth:	None	None	None	None	None
3403A: Loxley	None	None	None	Occasional None Long Depth:	None	None	None	None	None	None
Веветап	None	None	None	Occasional None Long Depth:	None	None	None	None	None	None
Dawson	None	None	None	Occasional None Long Depth:	None	None	None	None	None	None
3424C: Frogcreek	None	None	None	None	None	None	None	None	None	None
Magroc	None	None	None	None	None	None	None	None	None	None
Stinnett	None	None	None	None	None	None	None	None	None	None
Rock outcrop.										
3446A: Newson	None	None	None	Frequent Long Depth: 0.5	Frequent Long Depth:	None	None	None	None	None

Table 28. -- Ponding Frequency, Duration, and Depth--Continued

October	None	None	None	None		
September	None	None	None	None		
August	None	None 1	None 1	None		
July	None N	None N	None N	None N		
June	None No	None N	None	None		
Мау	None No	None No	None No	None No		
April	None No	None No	None No			
March	None No		None No	ne None		
February		None None		None		
January F	One None	None	one None	one None		
Map symbol   Je and   soil name		448C:   Grettum   None	ake N		Miscellaneous	I. Water
	3448B: Grett	3448C: Grett	3516A: Sliml	3629B: Perid	M-W. Mise	W. Wai

Table 29.--Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Map symbol	Restrictive	layer	Subsid	lence	   Potential	Risk of	corrosion
and soil name		Depth	<u> </u>		for	Uncoated	
	Kind	to top	Initial	Total	frost action	steel	Concrete
		In	In	In			
BA:	 				I I	l I	
Totagatic		>80	4-12	25-30	Moderate	  High	Moderate
		İ	į į		İ	ĺ	
Bowstring		>80	6-18	50-55	High	Moderate	Low
Ausable		>80	4-12	25-30	Moderate	  Moderate	Low
22A: Comstock	 	>80			  High	  High	Moderate
COMBCOCK							
24A:		į	į į			į	
Poskin	 	>80			High	High	Moderate
27A:	 					I 	
Scott Lake		>80	i i		Moderate	Moderate	Moderate
100							
R8B: Haugen, very stony	  Dense material	60-80			Moderate	Moderate	Moderate
			i i				
Haugen	Dense material	60-80			Moderate	Moderate	Moderate
Rosholt, very stony	 	>80			  Moderate	Low	Moderate
nosholo, toly soon,			i i				
Rosholt		>80			Moderate	Low	Moderate
28C:	l						
Haugen, very stony	  Dense material	60-80			Moderate	Moderate	Moderate
	İ	j	i i		İ	İ	j
Haugen	Dense material	60-80			Moderate	Moderate	Moderate
Rosholt, very stony	 	>80			Moderate	Low	Moderate
			i i			ĺ	i
Rosholt		>80			Moderate	Low	Moderate
33B:	 	l			I I	l I	
Chetek		>80	i i		Low	Low	Moderate
		İ	į į		İ	ĺ	İ
33C: Chetek	 	   >80			Low	Low	Moderate
Checek	 	>00			Low	LOW	Moderate
38A:	İ	į	į į		İ	İ	j
Rosholt		>80			Moderate	Low	Moderate
38B:	[ 					 	
Rosholt		>80	i i		Moderate	Low	Moderate
200							
B8C: Rosholt	 	   >80			Moderate	Low	  Moderate
			-	_			
38D:		į	į į			ļ	
Rosholt		>80			Moderate	Low	Moderate
12D:	[ 					 	
Amery	Dense material	60-80	i i		Moderate	Low	Moderate
25							
l3B: Antigo	 	   >80			  Moderate	Low	  Moderate
		/00			1	1-0"	Liouciace

Table 29.--Soil Features--Continued

Map symbol	Restrictive	layer	Subsid	lence	   Potential	Risk of	corrosion
and soil name	Kind	Depth	    Initial	Total	for for frost action	Uncoated steel	Concrete
		In	In	In	1		
43C:   Antigo		     >80	   		    Moderate 	    Low 	    Moderate 
43D: Antigo		   >80	     		  Moderate 	  Low 	  Moderate
48A:   Brill		   >80 	     		  High 	  Moderate	  Moderate
63A: Crystal Lake		   >80	     		  High 	  Moderate	  Moderate
63B:   Crystal Lake		   >80	 		  High 	  Moderate 	  Moderate
63C:   Crystal Lake		   >80	 		  High 	  Moderate 	  Moderate
63E:   Crystal Lake		   >80	     		  High	  Moderate	  Moderate
64A:   Totagatic		   >80	   4-12	25-30	  Moderate	  High	  Moderate
Winterfield		>80			Low	Low	Low
69B:   		>80	   		Low	    Low	    Moderate
Sayner		   >80			Low	Low	  High
 		   >80 	     		  Low 	  Low 	  Moderate 
69C: Keweenaw		   >80	 		Low	  Low 	  Moderate
Sayner		>80			Low	Low	High
   Vilas  		   >80 	     		  Low 	  Low 	  Moderate 
69E:     Keweenaw		   >80 	     		  Low 	  Low 	  Moderate 
Sayner		>80			Low	Low	High
Vilas		   >80 	 		Low	  Low 	  Moderate 
74B:     Vilas		   >80 	     		  Low 	  Low 	  Moderate 
74C:		   >80	 		Low	  Low 	  Moderate
74D:     Vilas		   >80	 		Low	    Low 	  Moderate
100B:   Menahga		>80	   		  Low 	    Low	    High
100C:   Menahga		     >80	   		  -  Low 	    Low 	    High 

Table 29.--Soil Features--Continued

Nap symbol and soli name				1 - 1 1		1		
		Restrictive 1		Subsic	ience			corrosion
In	and soil name		Depth			for	Uncoated	
1000:		Kind	to top	Initial	Total	frost action	steel	Concrete
Memanaga		1	In	In	In	1	1	I
Memabda		ì	i	i i		i	İ	i
Memabda	1000.	i	i	i			i I	i
1270;   Amery		}	.00			Torr	   T ass	   III i a b
Amery	Menanga		>00			LIOW	LTOM	hidu
Amery		ļ						
Noderate	127D:							
127E:   Amery	Amery	Dense material	60-80			Moderate	Low	Moderate
127E:   Amery		I	1					
1278:	Rosholt	i	>80	i i		Moderate	Low	Moderate
Amery		i		i				1
Amery	1278.	}	1			1	I I	 
Rosholt						1		
156B:   Magnor, very stony	Amery	Dense material	60-80			Moderate	LOM	Moderate
156B:   Magmor, very stony								
Magnor, very stony	Rosholt		>80			Moderate	Low	Moderate
Magnor, very stony		I	1					
Magnor	156B:	Ì	i	į i		İ	İ	İ
Magnor         Dense material         40-60          Moderate         Moderate         Moderate           157B:         Freeon, very stony         Dense material         40-60          Moderate         Moderate         Moderate           Freeon         Dense material         40-60          Moderate         Moderate         Moderate           157C:         Freeon, very stony         Dense material         40-60          Moderate         Moderate         Moderate           160A:           Moderate         Moderate         Moderate         Moderate           182B:           Moderate         Low         Moderate           192A:            Moderate         Moderate         Moderate           193A:           Moderate         Moderate         Moderate         Moderate           155B:            Low         Low         Moderate           215D:            Low         Low         Moderate           215D:	Magnor, very stony	Dense material	40-60	i i		Moderate	Moderate	Moderate
157B:   Freeon, very stony	nagnor, very beeny		1					
157B:   Freeon, very stony	Ma	  Dames makendal	1 40 60			Madamaka	135-3	   Madamaka
Precon, very stony   Dense material   40-60     Moderate   Moderate   Moderate   Moderate   Freeon   Dense material   40-60     Moderate   Moderat	magnor	Dense material	40-60			Moderate	Moderate	Moderate
Precon, very stony   Dense material   40-60     Moderate   Moderate   Moderate   Moderate   Freeon   Dense material   40-60     Moderate   Moderat		ļ						
Freeon	157B:							
157C:   Freeon, very stony   Dense material   40-60     Moderate   ate   Moder	Freeon, very stony	Dense material	40-60			Moderate	Moderate	Moderate
157C:   Freeon, very stony   Dense material   40-60     Moderate   ate   Moder		İ	İ	j i		İ	ĺ	İ
157C:   Freeon, very stony   Dense material   40-60     Moderate   ate   Moder	Freeon	Dense material	40-60	i i		Moderate	Moderate	Moderate
Freeon, very stony	1100011		1					
Freeon, very stony	1570.	}	1			 	l I	 
Freeon							 	
160A:	Freeon, very stony	Dense material	40-60			Moderate	Moderate	Moderate
160A:								
Oesterle	Freeon	Dense material	40-60			Moderate	Moderate	Moderate
Oesterle		I	1					
182B:	160A:	İ	İ	j i		İ	ĺ	ĺ
182B:	Oesterle	i	>80	i i		Moderate	Moderate	Moderate
Padus	00200220	i	1					
Padus	102D	}	1			l I	l I	 
182C:								
Padus	Padus	!	>80			Moderate	Low	Moderate
Padus								
192A:								
Worcester	Padus		>80			Moderate	Low	Moderate
Worcester		I	1					
Worcester	192A:	ì	i	i i		i	İ	i
193A: Minocqua		i	80	i i		Moderate	Moderate	Moderate
Minocqua	WOICEBCEL		200			Moderace	Moderace	Moderace
Minocqua		1	!					
215B:       >80        Low       Low       Moderate         215C:       Pence       >80        Low       Low       Moderate         215D:       Pence       >80        Low       Low       Moderate         315A:       Rib       >80        High       High       Moderate         337A:       Plover       >80        Moderate       Moderate       Moderate         368B:       Mahtomedi		ļ						
Pence	Minocqua		>80			High	High	Moderate
Pence         >80          Low         Moderate           215C:         Pence         >80          Low         Moderate           215D:         Pence         >80          Low         Moderate           315A:         Rib          High         High         Moderate           337A:         Plover         >80          Moderate         Moderate         Moderate           368B:         Mahtomedi          Low         Low         Moderate								
215C: Pence	215B:							
215C: Pence	Pence		>80			Low	Low	Moderate
Pence		ì	i	i i		i	İ	i
Pence	2150.	}	1			1	 	 
215D: Pence		1				1-		
Pence	Pence	!	>80			LOM	LOM	Moderate
Pence								
315A: Rib	215D:							
Rib	Pence		>80			Low	Low	Moderate
Rib				į į			1	
Rib	315A:	i	i	į i		i	i i	i
337A: Plover			\ Q n			High	High	Moderato
Plover	WTD	 I	/00			•••• 9••	••• <b>9••</b>	I
Plover	2252						 	
368B:		!	!	[		ļ.	!	ļ.
Mahtomedi	Plover		>80			Moderate	Moderate	Moderate
Mahtomedi								
Mahtomedi	368B:	I		į į				
i i i i i i i		i	>80	i i		Low	Low	Moderate
Cress		i				i	i	
	Crogg	I I	-00	[		I T CTV	I T CTV	Modern + -
	CTERR		>80			I TOM	I TOM	moderate
		I	I	1	l	I	I	I

Table 29.--Soil Features--Continued

Map symbol	Restrictiv	e layer	Subsid	lence	   Potential	Risk of	corrosion
and soil name	Kind	Depth  to top	Initial		for frost action	Uncoated steel	Concrete
		In 	In 	In		 	
368C:     Mahtomedi		>80			Low	  Low	  Moderate
Cress		>80			Low	Low	Moderate
368D:     Mahtomedi		>80			    Low	Low	Moderate
Cress		>80			Low	Low	Moderate
371A:   Croswell		     >80			    Low	    Low	    Moderate
380B:   Cress		     >80			    Low	    Low	    Moderate
Rosholt		>80	i i		  Moderate	Low	  Moderate
380C:						  -	
Cress		>80     >80			Low    Moderate	Low    Low	Moderate    Moderate
į		200					 
380D:		>80			Low	  Low 	  Moderate
Rosholt		   >80			Moderate	  Low 	  Moderate
383B:		   >80	 		Low	  Low	  Moderate
383C:   Mahtomedi		>80			Low	  Low	  Moderate
383D:   Mahtomedi		>80			Low	Low	  Moderate
396B:		>80			Low	Low	    Moderate
Wurtsmith		>80			Low	Low	  High
Grayling		>80			Low	  Low 	  Moderate
397A:		>80			Low	Low	  Moderate
399B:		>80			Low	Low	  Moderate
399C:   		     >80	   		Low	Low	    Moderate
399D:   		     >80	   		Low	    Low	    Moderate
405A:		     >80	     6-18	50-55	    High	    Moderate	Low
		>80	4-12	19-22	  High	  Moderate	  Moderate
Tawas		>80	4-15	25-30	  High	Moderate	Low

Table 29.--Soil Features--Continued

Map symbol	Restrictive 1	ayer	Subsid	lence	   Potential	Risk of	corrosion
and soil name		Depth			for	Uncoated	<u> </u>
	Kind	to top	Initial    In	Total In	frost action	steel	Concrete
						İ	
406A:   Loxley		>80	   6-18	50-55	  High	  Moderate	  High
407A:					i	i I	
Seelyeville		>80	0-8	20-22	High	Moderate	Moderate
Markey		>80	0-4     0-1	10-12	  High	  Moderate	Low
410A:		İ	i i			İ	İ
Seelyeville		>80	0-8	20-22	High	Moderate	Moderate
Cathro		>80	4-12     4-12	19-22	  High	  Moderate	Moderate
412A:						İ	
Rifle		>80			High	Moderate	Low
Tacoosh		>80	4-12	19-22	High	Moderate	Low
415A:			 			 	
Greenwood		>80	6-18	50-55	High	Moderate	High
439B:			 			 	I I
Graycalm		>80	i i		Low	Low	High
Menahga		>80			Low	Low	High
439C:			 			 	
Graycalm		>80	ļ ļ		Low	Low	High
Menahga		>80	 		Low	Low	  High
439D:			 			 	
Graycalm		>80			Low	Low	High
Menahga		>80	 		Low	Low	High
441C:						İ	
Freeon	Dense material	40-60	 		Moderate	Moderate	Moderate
Cathro		>80	4-12	19-22	High	Moderate	Moderate
442C:						 	
Haugen	Dense material	60-80	i i		Moderate	Moderate	Moderate
Greenwood		>80	 		  High	  Moderate	High
443D:			 			 	
Amery	Dense material	60-80	i i		Moderate	Low	Moderate
Greenwood		>80			  High	  Moderate	High
461A:			 			 	
Bowstring		>80	6-18	50-55	High	Moderate	Low
484A:							
Greenwood		>80			High	Moderate	High
Beseman		>80	4-18	12-36	High	  High	High
495B:			 		 	 	
Karlsborg		>80	i i		Moderate	High	Moderate

Table 29.--Soil Features--Continued

Map symbol	Restrictive 1	ayer	Subsid	dence	   Potential	Risk of	corrosion
and soil name	Kind	<del></del>	  Initial		for frost action	Uncoated steel	   Concrete
	 	In	In	In	l I		
495B: Grettum		>80			Low	Low	Moderate
Perida	 	   >80 	 		  Moderate 	  High 	  Moderate
495C: Karlsborg		>80	 		  Moderate	  High	Moderate
Grettum	 	>80			Low	  Low	  Moderate
Perida	 	>80	 		  Moderate	  High 	  Moderate
495D:					İ		
Karlsborg	 	>80 			Moderate	High 	Moderate
Grettum		>80			Low	Low	Moderate
Perida		>80			Moderate	  High 	Moderate
497A: Meenon	 	   >80	     		  Moderate	  High 	  Moderate
515A: Manitowish	   	   >80	 		  Low	  Low	  Moderate
521A: Dody		>80			    High	    High	  Moderate
524E: Rock outcrop.	 					 	
Frogcreek	  Dense material	40-60			  Moderate	  Moderate	  Moderate
Metonga	  Bedrock (lithic) 	20-40			  Moderate 	  Low 	  High 
542B: Haugen, very stony	  Dense material	60-80	 		  Moderate	  Moderate	  Moderate
Haugen	  Dense material	60-80			  Moderate	  Moderate	  Moderate
542C: Haugen, very stony	    Dense material	     60-80	   		    Moderate	    Moderate	    Moderate
Haugen	  Dense material	60-80			  Moderate	  Moderate	  Moderate
543B: Anigon	 	     >80	   		    Moderate	    Moderate	  Moderate
543C2: Anigon	 	     >80	   		    Moderate	    Moderate	  Moderate
544F: Menahga	   	     >80	   		Low	Low	    High
Mahtomedi	 	>80			Low	  Low	  Moderate
555A: Fordum	 	     >80	   		    High	    High	Low
574B: Sayner	   	     >80 	       		    Low 	    Low 	    High 

Table 29.--Soil Features--Continued

Map symbol	Restrictive	layer	Subsid	dence	   Potential	Risk of	corrosion
and soil name	Kind	Depth	    Initial	Total	for frost action	Uncoated steel	Concrete
	KING	to top	In	In	ITOSC accion	steer	Concrete
	į	į	į į		į	į	į
574C: Sayner	 	>80		 	Low	Low	  High
baynor							
574E: Sayner		>80		 	Low	Low	   Wieh
Bayner		>60					High 
579B:							
Parkfalls	Dense material	30-50		 	High 	Moderate	Moderate
600A:	į	į	į į		į	į	
Haplosaprists.					 	 	
Psammaquents.		İ	i i		İ		
615B:							
Cress		>80			Low	Low	Moderate
615C: Cress	 	>80		 	Low	Low	  Moderate
	į	į	į į		į	į	į
615D: Cress	 	>80		 	Low	Low	Moderate
CICDD							
623A: Capitola	  Denge meterial	20-40		 	   u.i.a.b	  u:ab	Moderate
Capitola	Delise Material	20-40			High 	High 	Moderace
624A:	į				į.	ļ	
Ossmer	 	>80 		 	Moderate	Moderate	Moderate
632A:	İ	į	į į		į	İ	
Aftad	 	>80			Moderate	Moderate	Moderate
632B:					İ		
Aftad		>80			Moderate	Moderate	Moderate
632C:					İ	 	
Aftad		>80			Moderate	Moderate	Moderate
633F:					l I	 	
Pence		>80			Low	Low	Moderate
Padus	 	>80		 	Moderate	Low	Moderate
			i i				
648B: Sconsin	Denge material	20-38		 	Moderate	Moderate	Moderate
SCORSTIN		20-36			Moderace		Moderate
670C:							Madamaka
Keweenaw	 	>80 		 	Low	Low	Moderate
Pence		>80			Low	Low	Moderate
670E:	 				l I	 	
Keweenaw		>80			Low	Low	Moderate
Pence		>80		 	Low	Low	Moderate
671B:					Low	Low	Moderate
Spoonerhill, stony		>80 		 	Low	Low	Moderate
Spoonerhill		>80			Low	Low	Moderate
					1		

Table 29.--Soil Features--Continued

Map symbol	Restrictive	layer	Subsid	lence	   Potential	Risk of	corrosion
and soil name	Kind	Depth to top	    Initial	Total	for frost action	Uncoated steel	Concrete
		In	In	In			
680B: Stanberry, stony	    Dense material	40-60	   	   	    Moderate	    Moderate	  Moderate
Pence, stony	 	>80			Low	Low	  Moderate
683A: Tipler	   	>80	   		    Moderate	    Moderate	  Moderate
706A: Winterfield	   	>80			Low	    Low	Low
Totagatic	 	>80			  Moderate	  High	  Moderate
724A: Rib	   	     >80	   	   	    High 	    High 	    Moderate 
Rock outcrop.						 	
726B: Sissabagama	   	     >80	   	   	  -  Low- 	    Low 	    Moderate 
733A: Wozny	  Dense material	40-60	 		    High	  High	Moderate
771A: Lenroot	   	>80	   		  -  Low	    Low 	  Moderate
827A: Scoba	 	   >80	   	 	    Moderate 	  Moderate 	  Moderate
853C: Frogcreek	    Dense material	40-60			  Moderate	Moderate	Moderate
Stinnett	  Dense material	40-60		 	  Moderate	  Moderate 	  Moderate
Wozny	  Dense material	40-60			  High 	  High 	  Moderate 
856B: Stinnett	    Dense material 	40-60	     		  Moderate 	  Moderate 	  Moderate
857B: Frogcreek	    Dense material	40-60	     		  Moderate 	  Moderate	  Moderate
857C: Frogcreek	  Dense material	   40-60 	     	   	  Moderate 	  Moderate	  Moderate
873B: Stanberry	  Dense material	40-60	 		  Moderate	  Moderate	Moderate
873C: Stanberry	    Dense material	40-60	 	 	  Moderate	  Moderate 	  Moderate
873D: Stanberry	    Dense material	40-60	   		    Moderate 	    Moderate 	  Moderate
905A: Cublake	   	>80	   		  -  Low	    Low 	    High
926A: Flink	   	     >80	   	   	    Moderate 	  Low 	    High 

Table 29.--Soil Features--Continued

Map symbol	Restrictive 1	ayer	Subsid	lence	   Potential	Risk of	corrosion
and soil name	Kind	Depth to top	    Initial	Total	for frost action	Uncoated steel	Concrete
		In	In	In			
943D: Stanberry	    Dense material	     40-60	   		    Moderate	    Moderate	    Moderate
Greenwood	 	>80			  High	  Moderate	  High
948A: Billyboy	 	     >80	   		    Moderate 	    Moderate 	    Moderate
970C: Keweenaw	 	   >80	   		Low	    Low	  Moderate
Pence		>80			Low	Low	Moderate
Greenwood	   	>80			  High 	  Moderate 	  High
970E: Keweenaw	 	   >80	 		Low	  Low	  Moderate
Pence		>80			Low	Low	Moderate
Greenwood	 	>80			  High 	  Moderate 	High
1070C: Fremstadt	 	>80	 		Low	  Low	  Moderate
Cress		>80			Low	Low	Moderate
1070D: Fremstadt	   	     >80	   		Low	    Low	  Moderate
Cress		>80 			Low	Low	Moderate
1080B: Spoonerhill	 	   >80	 		Low	  Low	  Moderate
Spoonerhill, stony		>80	ļ ļ		Low	Low	Moderate
Cress	 	>80			Low	  Low 	Moderate
1653C: Stanberry	    Dense material	40-60	i i		  Moderate	  Moderate	  Moderate
Parkfalls	  Dense material	30-50			  High	  Moderate	Moderate
Wozny	  Dense material 	40-60			  High 	  High 	Moderate
2015. Pits	 	   			   	   	
2050. Landfill	 					     	
3011A: Barronett	 	     >80	   		    High	    High	    Moderate
3125A: Meehan	 	     >80	   		Low	    Low	    High
3126A: Wurtsmith	 	     >80	   		Low	    Low	    High

Table 29.--Soil Features--Continued

Map symbol	Restrictive 1	ayer	Subsid	lence	   Potential	Risk of	corrosion
and soil name	Kind	Depth	    Tnitio1	Total	for frost action	Uncoated steel	Concrete
	Kind	to top	Initial    In	Tn	Frost action	steel	Concrete
	 	111	111	111		 	
3276A:	İ	İ	į į		İ	İ	İ
Au Gres		>80			Low	Low	High
3312B:	 	l I			1		
Glendenning, very stony	Dense material	60-80			Moderate	Moderate	Moderate
	Ì	İ	į į		İ	ĺ	İ
Glendenning	Dense material	60-80			Moderate	Moderate	Moderate
3336A:	1	1			1	 	
Fenander	i	>80	i i		High	High	Low
3403A: Loxley	 	>80	   6-18	50-55	  High	Moderate	  High
	İ			30 33			
Beseman		>80	4-18	12-36	High	Moderate	High
Dawson	 	   >80	4-18	30-36	High	Moderate	  High
Dawson		200	4-10	30-30		Moderate	
3424C:	İ	İ	į į		İ		
Frogcreek	Dense material	40-60			Moderate	Moderate	Moderate
Magroc	  Bedrock (lithic)	40-60			Moderate	Moderate	Moderate
	į	į	į į		į	ĺ	į
Stinnett	Dense material	40-60			Moderate	Moderate	Moderate
Rock outcrop.	İ						
_	Ì	İ	į į		İ	ĺ	İ
8446A: Newson	 	>80			Moderate	  High	  High
Newsoll		>00			Moderace	  -	High
3448B:	Ì	İ	i i		İ	İ	
Grettum		>80			Low	Low	Moderate
3448C:	1	1			1	 	
Grettum	i	>80	i i		Low	Low	Moderate
NE163							
8516A: Slimlake	 	>80			Low	Low	Moderate
	į	İ	i i		İ		
6629B:						 	120.00
Perida	 	>80 			Moderate	High 	Moderate
1-W.			i i			İ	
Miscellaneous water	ļ					!	
1.	 					 	
Water							
	İ	İ	i i		İ	İ	İ

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## **Glossary**

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the "National Soil Survey Handbook" (available in local offices of the Natural Resources Conservation Service or on the Internet).

- **Ablation till.** Loose, relatively permeable earthy material deposited during the downwasting of nearly static glacial ice, either contained within or accumulated on the surface of the glacier.
- **Aeration, soil.** The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.
- **Aggregate, soil.** Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.
- **Alluvium.** Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.
- **Alpha,alpha-dipyridyl.** A compound that when dissolved in ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction implies reducing conditions and the likely presence of redoximorphic features.
- **Aquic conditions.** Current soil wetness characterized by saturation, reduction, and redoximorphic features.
- **Argillic horizon.** A subsoil horizon characterized by an accumulation of illuvial clay. **Aspect.** The direction toward which a slope faces. Also called slope aspect.
- **Association, soil.** A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.
- Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

**Backslope.** The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

**Basal till.** Compact till deposited beneath the glacial ice.

- **Base saturation.** The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.
- **Base slope** (geomorphology). A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the

lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

- **Beach deposits.** Material, such as sand and gravel, that is generally laid down parallel to an active or relict shoreline of a postglacial or glacial lake.
- **Beach ridge.** A low, essentially continuous mound of beach or beach-and-dune material accumulated by the action of waves and currents on the backshore of a beach, beyond the present limit of storm waves or the reach of ordinary tides, and occurring singly or as one of a series of approximately parallel deposits. The ridges are roughly parallel to the shoreline and represent successive positions of an advancing shoreline.
- **Bedding plane.** A planar or nearly planar bedding surface that visibly separates each successive layer of stratified sediment or rock (of the same or different lithology) from the preceding or following layer; a plane of deposition. It commonly marks a change in the circumstances of deposition and may show a parting, a color difference, a change in particle size, or various combinations of these. The term is commonly applied to any bedding surface, even one that is conspicuously bent or deformed by folding.
- **Bedrock.** The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.
- **Bedrock-controlled topography.** A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.
- **Bench terrace.** A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.
- **Bisequum.** Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.
- **Blowout.** A saucer-, cup-, or trough-shaped depression formed by wind erosion on a preexisting dune or other sand deposit, especially in an area of shifting sand or loose soil or where protective vegetation is disturbed or destroyed; the adjoining accumulation of sand derived from the depression, where recognizable, is commonly included. Blowouts are commonly small.
- **Board foot.** A unit of measurement represented by a board 1 foot wide, 1 foot long, and 1 inch thick.
- **Bog.** Waterlogged, spongy ground, consisting primarily of mosses, containing acidic, decaying vegetation (such as sphagnum, sedges, and heaths) that develops into peat.
- **Boulders.** Rock fragments larger than 2 feet (60 centimeters) in diameter.
- **Brush management.** Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.
- **Calcareous soil.** A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.
- **California bearing ratio** (CBR). The load-supporting capacity of a soil as compared to that of standard crushed limestone, expressed as a ratio. First standardized in California. A soil having a CBR of 16 supports 16 percent of the load that would be supported by standard crushed limestone, per unit area, with the same degree of distortion.
- **Canopy.** The leafy crown of trees or shrubs. (See Crown.)
- **Capillary water.** Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

- **Catena.** A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material and under similar climatic conditions but that have different characteristics as a result of differences in relief and drainage.
- **Cation.** An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.
- **Cation-exchange capacity.** The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Catsteps. See Terracettes.

**Channery soil material.** Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

**Chemical treatment.** Control of unwanted vegetation through the use of chemicals. **Chiseling.** Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

**Clay.** As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. See Redoximorphic features.

**Clay film.** A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

**Climax plant community.** The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

**Closed depression (map symbol).** A shallow, saucer-shaped area that is slightly lower on the landscape than the surrounding area and is without a natural outlet for surface drainage. Typically less than 4 acres.

Coarse textured soil. Sand or loamy sand.

**Cobble (or cobblestone).** A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

**Cobbly soil material.** Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

COLE (coefficient of linear extensibility). See Linear extensibility.

**Colluvium.** Unconsolidated, unsorted earth material being transported or deposited on side slopes and/or at the base of slopes by mass movement (e.g., direct gravitational action) and by local, unconcentrated runoff.

**Complex slope.** Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

**Complex, soil.** A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Concretions. See Redoximorphic features.

Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

**Conservation tillage.** A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

- Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."
- **Contour stripcropping.** Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.
- **Coprogenous earth (sedimentary peat).** A type of limnic layer composed predominantly of fecal material derived from aquatic animals.
- **Cord.** A unit of measurement of stacked wood. A standard cord occupies 128 cubic feet with dimensions of 4 feet by 4 feet by 8 feet.
- **Corrosion** (geomorphology). A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.
- **Corrosion** (soil survey interpretations). Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.
- **Cover crop.** A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.
- **Crop residue management.** Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.
- **Cropping system.** Growing crops according to a planned system of rotation and management practices.
- **Cross-slope farming.** Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.
- **Crown.** The upper part of a tree or shrub, including the living branches and their foliage.
- Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.
- **Cut or fill area (map symbol).** A small area where the original soil profile has been altered by the addition or removal of more than about 1 foot of soil material. Includes former pits that have been reclaimed. Each symbol represents one area or several closely grouped areas totaling less than 4 acres.
- **Cutbanks cave** (in tables). The walls of excavations tend to cave in or slough.
- **Decreasers.** The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.
- **Deferred grazing.** Postponing grazing or resting grazing land for a prescribed period. **Delta.** A body of alluvium having a surface that is fan shaped and nearly flat; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.
- **Dense layer** (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

- **Depression.** Any relatively sunken part of the earth's surface; especially a low-lying area surrounded by higher ground. A closed depression has no natural outlet for surface drainage. An open depression has a natural outlet for surface drainage.
- **Depth, soil.** Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.
- **Disintegration moraine.** A drift topography characterized by chaotic mounds and pits, generally randomly oriented, developed in supraglacial drift by collapse and flow as the underlying stagnant ice melted. Slopes may be steep and unstable. Abrupt changes between materials of differing lithology are common.
- **Diversion (or diversion terrace).** A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.
- Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."
- **Drainage, surface.** Runoff, or surface flow of water, from an area.
- **Drainageway.** A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.
- **Drift.** A general term applied to all mineral material (clay, silt, sand, gravel, and boulders) transported by a glacier and deposited directly by or from the ice or transported by running water emanating from a glacier. Drift includes unstratified material (till) that forms moraines and stratified deposits that form outwash plains, eskers, kames, varves, and glaciofluvial sediments. The term is generally applied to Pleistocene glacial deposits in areas that no longer contain glaciers.
- **Drumlin.** A low, smooth, elongated oval hill, mound, or ridge of compact till that has a core of bedrock or drift. It commonly has a blunt nose facing the direction from which the ice approached and a gentler slope tapering in the other direction. The longer axis is parallel to the general direction of glacier flow. Drumlins are products of streamline (laminar) flow of glaciers, which molded the subglacial floor through a combination of erosion and deposition.
- **Dry spot (map symbol).** A small area of moderately well drained to excessively drained soil within a poorly drained or very poorly drained area of mineral soil, or a somewhat poorly drained to excessively drained soil within a map unit consisting mainly of organic soil. Each symbol represents one area or several closely grouped areas totaling less than 4 acres.
- **Duff.** A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.
- **Eluviation.** The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.
- **End moraine.** A ridgelike accumulation produced at the outer margin of an actively flowing glacier at any given time.
- **Endosaturation.** A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.
- **Eolian deposit.** Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.

**Ephemeral stream.** A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

- **Episaturation.** A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.
- **Erosion.** The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.
  - *Erosion* (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.
  - *Erosion* (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.
- **Erosion pavement.** A surficial lag concentration or layer of gravel and other rock fragments that remains on the soil surface after sheet or rill erosion or wind has removed the finer soil particles and that tends to protect the underlying soil from further erosion.
- **Erosion surface.** A land surface shaped by the action of erosion, especially by running water.
- **Escarpment.** A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Most commonly applied to cliffs produced by differential erosion.
- **Escarpment, bedrock (map symbol).** A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Exposed material is hard or soft bedrock.
- **Escarpment, nonbedrock (map symbol).** A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Exposed material is nonsoil or very shallow soil.
- **Esker.** A long, narrow, sinuous, steep-sided ridge of stratified sand and gravel deposited as the bed of a stream flowing in an ice tunnel within or below the ice (subglacial) or between ice walls on top of the ice of a wasting glacier and left behind as high ground when the ice melted. Eskers range in length from less than a kilometer to more than 160 kilometers and in height from 3 to 30 meters.
- **Fan remnant.** A general term for landforms that are the remaining parts of older fan landforms, such as alluvial fans, that have been either dissected or partially buried.
- **Fertility, soil.** The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.
- **Fibric soil material (peat).** The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.
- **Field moisture capacity.** The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity*, *normal moisture capacity*, or *capillary capacity*.
- Fine textured soil. Sandy clay, silty clay, or clay.
- **Firebreak.** An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

- **Flaggy soil material.** Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.
- **Flagstone.** A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.
- **Flood plain.** The nearly level plain that borders a stream and is subject to flooding unless protected artificially.
- **Flood-plain landforms.** A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, floodplain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.
- **Flood-plain splay.** A fan-shaped deposit or other outspread deposit formed where an overloaded stream breaks through a levee (natural or artificial) and deposits its material (commonly coarse grained) on the flood plain.
- **Flood-plain step.** An essentially flat, terrace-like alluvial surface within a valley that is frequently covered by floodwater from the present stream; any approximately horizontal surface still actively modified by fluvial scour and/or deposition. May occur individually or as a series of steps.
- Fluvial. Of or pertaining to rivers or streams; produced by stream or river action.
- **Footslope.** The concave surface at the base of a hillslope. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).
- Forb. Any herbaceous plant not a grass or a sedge.
- **Forest cover.** All trees and other woody plants (underbrush) covering the ground in a forest.
- **Forest habitat type.** An association of dominant tree and ground flora species in a climax community.
- **Fragipan.** A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.
- **Genesis, soil.** The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.
- **Glaciofluvial deposits.** Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur in the form of outwash plains, valley trains, deltas, kames, eskers, and kame terraces.
- **Glaciolacustrine deposits.** Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are bedded or laminated.
- **Gleyed soil.** Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.
- **Graded stripcropping.** Growing crops in strips that grade toward a protected waterway.
- **Grassed waterway.** A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.
- **Gravel.** Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.
- **Gravel pit (map symbol).** An open excavation from which soil and underlying material have been removed and used, without crushing, as a source of sand or gravel. Typically less than 4 acres.

**Gravelly soil material.** Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

- **Gravelly spot (map symbol).** An area where the surface layer has more than 35 percent, by volume, rock fragments that are mostly less than 3 inches in diameter within an area that has less than 15 percent rock fragments. Typically less than 4 acres
- **Green manure crop** (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.
- **Ground water.** Water filling all the unblocked pores of the material below the water table.
- **Gully.** A small channel with steep sides caused by erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.
- **Gully (map symbol).** A small channel with steep sides, cut by running water, through which water ordinarily runs only after a rain or after melting of snow or ice. It generally is an obstacle to wheeled vehicles and is too deep to be obliterated by ordinary tillage.
- **Hard bedrock.** Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.
- **Hard to reclaim** (in tables). Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.
- **Head slope (geomorphology).** A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.
- **Hemic soil material (mucky peat).** Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.
- **High-residue crops.** Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.
- **Hill.** A generic term for an elevated area of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline. Slopes are generally more than 15 percent. The distinction between a hill and a mountain is arbitrary and may depend on local usage.
- **Hillslope.** A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.
- Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:
  - O horizon.—An organic layer of fresh and decaying plant residue.
  - *L horizon.*—A layer of organic and mineral limnic materials, including coprogenous earth (sedimentary peat), diatomaceous earth, and marl.
  - A horizon.—The mineral horizon at or near the surface in which an accumulation

of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

*E horizon.*—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

*B horizon.*—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

*C horizon.*—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.—Soft, consolidated bedrock beneath the soil.

*R layer.*—Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

- **Humus.** The well decomposed, more or less stable part of the organic matter in mineral soils.
- **Hydrologic soil groups.** Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.
- **Ice-walled lake plain.** A relict surface marking the floor of an extinct lake basin that was formed on solid ground and surrounded by stagnant ice in a stable or unstable superglacial environment on stagnation moraines. As the ice melted, the lake plain became perched above the adjacent landscape. The lake plain is well sorted, generally fine textured, stratified deposits.
- **Igneous rock.** Rock that was formed by cooling and solidification of magma and that has not been changed appreciably by weathering since its formation. Major varieties include plutonic and volcanic rock (e.g., andesite, basalt, and granite).
- **Illuviation.** The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.
- **Impervious soil.** A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.
- **Increasers.** Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.
- **Infiltration.** The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.
- **Infiltration capacity.** The maximum rate at which water can infiltrate into a soil under a given set of conditions.
- **Infiltration rate.** The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.
- **Intake rate.** The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake

rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

- **Interfluve.** A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general direction. An elevated area between two drainageways that sheds water to those drainageways.
- Interfluve (geomorphology). A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.
- Intermittent stream. A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.
- **Invaders.** On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

Iron depletions. See Redoximorphic features.

**Irrigation.** Application of water to soils to assist in production of crops. Methods of irrigation are:

Basin.—Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

Controlled flooding.—Water is released at intervals from closely spaced field

ditches and distributed uniformly over the field.

Corrugation.—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

*Drip (or trickle).*—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

*Furrow.*—Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

*Sprinkler.*—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Subirrigation.—Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

*Wild flooding.*—Water, released at high points, is allowed to flow onto an area without controlled distribution.

**Island (map symbol).** A small area of mineral soil within a body of water and above the normal water level. Each symbol represents one island or several closely grouped islands totaling less than 4 acres.

**Kame.** A low mound, knob, hummock, or short irregular ridge composed of stratified sand and gravel deposited by a subglacial stream as a fan or delta at the margin

of a melting glacier; by a supraglacial stream in a low place or hole on the surface of the glacier; or as a ponded deposit on the surface or at the margin of stagnant ice.

**Karst** (topography). A kind of topography that formed in limestone, gypsum, or other soluble rocks by dissolution and that is characterized by closed depressions, sinkholes, caves, and underground drainage.

Knoll. A small, low, rounded hill rising above adjacent landforms.

**K**<sub>sat</sub>. Saturated hydraulic conductivity. (See Permeability.)

**Lacustrine deposit.** Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

**Lake plain.** A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

**Lake terrace.** A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

Landslide. A general, encompassing term for most types of mass movement landforms and processes involving the downslope transport and outward deposition of soil and rock materials caused by gravitational forces; the movement may or may not involve saturated materials. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

**Large stones** (in tables). Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

**Leaching.** The removal of soluble material from soil or other material by percolating water.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at ½- or ½- bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

**Liquid limit.** The moisture content at which the soil passes from a plastic to a liquid state.

**Loam.** Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

**Loess.** Material transported and deposited by wind and consisting dominantly of silt-sized particles.

Low strength. The soil is not strong enough to support loads.

**Low-residue crops.** Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

**Marl.** An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal proportions; formed primarily under freshwater lacustrine conditions but also formed in more saline environments.

**Mass movement.** A generic term for the dislodgment and downslope transport of soil and rock material as a unit under direct gravitational stress.

Masses. See Redoximorphic features.

**Mechanical treatment.** Use of mechanical equipment for seeding, brush management, and other management practices.

**Medium textured soil.** Very fine sandy loam, loam, silt loam, or silt.

**Metamorphic rock.** Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement at depth in the earth's crust. Nearly all such rocks are crystalline.

**Mine spoil.** An accumulation of displaced earthy material, rock, or other waste material removed during mining or excavation. Also called earthy fill.

- **Mineral soil.** Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.
- **Minimum tillage.** Only the tillage essential to crop production and prevention of soil damage.
- **Miscellaneous area.** A kind of map unit that has little or no natural soil and supports little or no vegetation.
- **Moderately coarse textured soil.** Coarse sandy loam, sandy loam, or fine sandy loam.
- Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.
- **Mollic epipedon.** A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.
- Moraine. In terms of glacial geology, a mound, ridge, or other topographically distinct accumulation of unsorted, unstratified drift, predominantly till, deposited primarily by the direct action of glacial ice in a variety of landforms. Also, a general term for a landform composed mainly of till (except for kame moraines, which are composed mainly of stratified outwash) that has been deposited by a glacier. Some types of moraines are disintegration, end, ground, kame, lateral, recessional, and terminal.
- **Morphology, soil.** The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.
- Mottling, soil. Irregular spots of different colors that vary in number and size.

  Descriptive terms are as follows: abundance—few, common, and many; size—fine, medium, and coarse; and contrast—faint, distinct, and prominent. The size measurements are of the diameter along the greatest dimension. Fine indicates less than 5 millimeters (about 0.2 inch); medium, from 5 to 15 millimeters (about 0.2 to 0.6 inch); and coarse, more than 15 millimeters (about 0.6 inch).
- **Muck.** Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)
- **Mudstone.** A blocky or massive, fine grained sedimentary rock in which the proportions of clay and silt are approximately equal. Also, a general term for such material as clay, silt, claystone, siltstone, shale, and argillite and that should be used only when the amounts of clay and silt are not known or cannot be precisely identified.
- **Munsell notation.** A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.
- **Neutral soil.** A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.) **Nodules.** See Redoximorphic features.
- **Nose slope** (geomorphology). A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent. Nose slopes consist dominantly of colluvium and slopewash sediments (for example, slope alluvium).
- **Nutrient, plant.** Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

**Organic matter.** Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low	1.0 to 2.0 percent
Moderate	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high	more than 8.0 percent

**Outwash.** Stratified and sorted sediments (chiefly sand and gravel) removed or "washed out" from a glacier by meltwater streams and deposited in front of or beyond the end moraine or the margin of a glacier. The coarser material is deposited nearer to the ice.

**Outwash plain.** An extensive lowland area of coarse textured glaciofluvial material. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

**Parent material.** The unconsolidated organic and mineral material in which soil forms.

**Peat.** Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

**Ped.** An individual natural soil aggregate, such as a granule, a prism, or a block. **Pedisediment.** A layer of sediment, eroded from the shoulder and backslope of an erosional slope, that lies on and is being (or was) transported across a gently sloping erosional surface at the foot of a receding hill or mountain slope.

**Pedon.** The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

**Percolation.** The movement of water through the soil.

**Perennial water (map symbol).** A small, natural or constructed lake, pond, or pit that contains water most of the year. Each symbol represents one area of water or several closely grouped areas of water totaling less than 4 acres.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Impermeable	less than 0.0015 inch
Very slow	0.0015 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

**Piping** (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

- **Pitted outwash plain.** An outwash plain marked by many irregular depressions, such as kettles, shallow pits, and potholes, which formed by melting of incorporated ice masses; common in Wisconsin and Minnesota.
- **Pitting** (in tables). Pits caused by melting around ice. They form on the soil after plant cover is removed.
- **Plastic limit.** The moisture content at which a soil changes from semisolid to plastic.
- **Plasticity index.** The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.
- Plateau (geomorphology). A comparatively flat area of great extent and elevation; specifically, an extensive land region that is considerably elevated (more than 100 meters) above the adjacent lower lying terrain, is commonly limited on at least one side by an abrupt descent, and has a flat or nearly level surface. A comparatively large part of a plateau surface is near summit level.
- **Plowpan.** A compacted layer formed in the soil directly below the plowed layer.
- **Poletimber.** Hardwood trees ranging from 5 to 11 inches in diameter and conifers ranging from 5 to 9 inches in diameter at breast height.
- **Ponding.** Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.
- **Poorly graded.** Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.
- Pore linings. See Redoximorphic features.
- Potential native plant community. See Climax plant community.
- Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.
- **Prescribed burning.** Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.
- **Productivity, soil.** The capability of a soil for producing a specified plant or sequence of plants under specific management.
- **Profile, soil.** A vertical section of the soil extending through all its horizons and into the parent material.
- Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.
- **Rangeland.** Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.
- **Reaction, soil.** A measure of acidity or alkalinity of a soil, expressed as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0

Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

**Redoximorphic concentrations.** See Redoximorphic features. **Redoximorphic depletions.** See Redoximorphic features.

Redoximorphic features. Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

- 1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides, including:
  - A. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; and
  - B. Masses, which are noncemented concentrations of substances within the soil matrix; *and*
  - C. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.
- 2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out, including:
  - A. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; and
  - B. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletans).
- 3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

**Reduced matrix.** See Redoximorphic features.

**Regolith.** All unconsolidated earth materials above the solid bedrock. It includes material weathered in place from all kinds of bedrock and alluvial, glacial, eolian, lacustrine, and pyroclastic deposits.

**Relief.** The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

**Residuum (residual soil material).** Unconsolidated, weathered or partly weathered mineral material that accumulated as bedrock disintegrated in place.

**Rill.** A very small, steep-sided channel resulting from erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. A rill

generally is not an obstacle to wheeled vehicles and is shallow enough to be smoothed over by ordinary tillage.

- **Riser.** The vertical or steep side slope (e.g., escarpment) of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural, steplike landforms, such as successive stream terraces.
- **Road cut.** A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.
- **Rock fragments.** Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.
- **Rock outcrop (map symbol).** An exposure of bedrock at the surface of the earth. Not used where the named soils of the surrounding map unit are shallow over bedrock. Each symbol represents one exposure or several closely grouped exposures totaling less than 4 acres.
- Root zone. The part of the soil that can be penetrated by plant roots.
- **Runoff.** The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called groundwater runoff or seepage flow from ground water.
- **Saline soil.** A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.
- **Sand.** As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.
- **Sandstone.** Sedimentary rock containing dominantly sand-sized particles.
- **Sandy spot (map symbol).** An area where the surface layer is loamy fine sand or coarser within an area where the surface layer of the named soils in the surrounding map unit is very fine sandy loam or finer. Typically less than 4 acres.
- **Sapling.** A tree ranging from 1 to 5 inches in diameter at breast height.
- **Sapric soil material (muck).** The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.
- Saturated hydraulic conductivity (K<sub>sat</sub>). See Permeability.
- **Saturation.** Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.
- **Sawtimber.** Hardwood trees more than 11 inches in diameter and conifers more than 9 inches in diameter at breast height.
- **Scarification.** The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.
- Sedimentary rock. A consolidated deposit of clastic particles, chemical precipitates, or organic remains accumulated at or near the surface of the earth under normal low temperature and pressure conditions. Sedimentary rocks include consolidated equivalents of alluvium, colluvium, drift, and eolian, lacustrine, and marine deposits. Examples are sandstone, siltstone, mudstone, claystone, shale, conglomerate, limestone, dolomite, and coal.
- Seedling. A tree less than 1 inch in diameter at breast height.
- **Sequum.** A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)
- **Series, soil.** A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

- **Shale.** Sedimentary rock that formed by the hardening of a deposit of clay, silty clay, or silty clay loam and that has a tendency to split into thin layers.
- **Sheet erosion.** The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.
- **Short**, **steep slope** (map symbol). A narrow area of soil that is at least two slope classes steeper than the surrounding map unit.
- **Shoulder.** The convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.
- **Shrink-swell** (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.
- **Side slope** (geomorphology). A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.
- **Silica.** A combination of silicon and oxygen. The mineral form is called guartz.
- **Silt.** As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.
- **Siltstone.** An indurated silt having the texture and composition of shale but lacking its fine lamination or fissility; a massive mudstone in which silt predominates over clay.
- **Similar soils.** Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.
- Sinkhole. A closed, circular or elliptical depression, commonly funnel shaped, characterized by subsurface drainage and formed either by dissolution of the surface of underlying bedrock (e.g., limestone, gypsum, or salt) or by collapse of underlying caves within bedrock. Complexes of sinkholes in carbonate-rock terrain are the main components of karst topography.
- **Site index.** A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.
- **Slope.** The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance.
- Slope alluvium. Sediment gradually transported down the slopes of mountains or hills primarily by nonchannel alluvial processes (i.e., slope-wash processes) and characterized by particle sorting. Lateral particle sorting is evident on long slopes. In a profile sequence, sediments may be distinguished by differences in size and/ or specific gravity of rock fragments and may be separated by stone lines. Burnished peds and sorting of rounded or subrounded pebbles or cobbles distinguish these materials from unsorted colluvial deposits.
- **Slow refill** (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.
- **Soft bedrock.** Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.
- **Soil.** A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

**Soil separates.** Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

- **Solum.** The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.
- Stone line. In a vertical cross section, a line formed by scattered fragments or a discrete layer of angular and subangular rock fragments (commonly a gravel- or cobble-sized lag concentration) that formerly was draped across a topographic surface and was later buried by additional sediments. A stone line generally caps material that was subject to weathering, soil formation, and erosion before burial. Many stone lines seem to be buried erosion pavements, originally formed by sheet and rill erosion across the land surface.
- **Stones.** Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.
- **Stony.** Refers to a soil containing stones in numbers that interfere with or prevent tillage.
- **Strath terrace.** A type of stream terrace; formed as an erosional surface cut on bedrock and thinly mantled with stream deposits (alluvium).
- **Stream terrace.** One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel, originally formed near the level of the stream; represents the remnants of an abandoned flood plain, stream bed, or valley floor produced during a former state of fluvial erosion or deposition.
- **Stripcropping.** Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.
- Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—platy (laminated), prismatic (vertical axis of aggregates longer than horizontal), columnar (prisms with rounded tops), blocky (angular or subangular), and granular. Structureless soils are either single grained (each grain by itself, as in dune sand) or massive (the particles adhering without any regular cleavage, as in many hardpans).
- **Stubble mulch.** Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.
- **Subsoil.** Technically, the B horizon; roughly, the part of the solum below plow depth. **Subsoiling.** Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

**Substratum.** The part of the soil below the solum.

**Subsurface layer.** Any surface soil horizon (A, E, AB, or EB) below the surface layer. **Summit.** The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

- **Surface layer.** The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the "plow layer," or the "Ap horizon."
- **Surface soil.** The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.
- **Swale.** A slight depression in the midst of generally level land. A shallow depression in an undulating ground moraine caused by uneven glacial deposition.
- **Terminal moraine.** An end moraine that marks the farthest advance of a glacier. It typically has the form of a massive arcuate or concentric ridge, or complex of ridges, and is underlain by till and other types of drift.
- **Terrace** (conservation). An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.
- **Terrace** (geomorphology). A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.
- **Terracettes.** Small, irregular steplike forms on steep hillslopes, especially in pasture, formed by creep or erosion of surficial materials that may be induced or enhanced by trampling of livestock, such as sheep or cattle.
- **Texture, soil.** The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, and clay. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."
- **Thin layer** (in tables). Otherwise suitable soil material that is too thin for the specified use.
- **Till.** Dominantly unsorted and nonstratified drift, generally unconsolidated and deposited directly by a glacier without subsequent reworking by meltwater, and consisting of a heterogeneous mixture of clay, silt, sand, gravel, stones, and boulders; rock fragments of various lithologies are embedded within a finer matrix that can range from clay to sandy loam.
- **Till plain.** An extensive area of level to gently undulating soils underlain predominantly by till and bounded at the distal end by subordinate recessional or end moraines.
- **Tilth, soil.** The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.
- **Toeslope.** The gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.
- **Topsoil.** The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.
- **Trace elements.** Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.
- **Tread.** The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.
- **Upland.** An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation

- than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.
- **Valley fill.** The unconsolidated sediment deposited by any agent (water, wind, ice, or mass wasting) so as to fill or partly fill a valley.
- **Variegation.** Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.
- **Varve.** A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.
- **Very stony spot (map symbol).** An area in which 0.1 to 3.0 percent of the surface is covered by rock fragments more than 10 inches in diameter within an area that does not have rock fragments on the surface. Typically less than 4 acres.
- **Water bars.** Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.
- **Weathering.** All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.
- **Well graded.** Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.
- **Wet spot (map symbol).** An area of somewhat poorly drained to very poorly drained soil at least two drainage classes wetter than the named soils in the surrounding map unit. Each symbol represents one wet area or several grouped wet areas totaling less than 4 acres.
- **Wilting point (or permanent wilting point).** The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.
- **Windthrow.** The uprooting and tipping over of trees by the wind.

## Where To Get Updated Information

The soil properties and interpretations included in this survey were current as of October 2004. More current information may be available from the Natural Resources Conservation Service (NRCS) Field Office Technical Guide at Spooner, Wisconsin, or online at www.nrcs.usda.gov/technical/efotg. The data in the Field Office Technical Guide are updated periodically.

More current information may also be available through the NRCS Soil Data Mart Website at http://soildatamart.nrcs.usda.gov.

Additional information about soils and about NRCS is available through the Wisconsin NRCS Web page at www.wi.nrcs.usda.gov.

For further information, please contact:

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